

PSYCHOLOGICAL ABSTRACTS

VOL. XVI, No. 3

MARCH, 1942

GENERAL (incl. Statistics)

830. Averill, L. A. William Henry Burnham. *Ment. Hyg., N. Y.*, 1941, 25, 647-649.—Obituary.—W. L. Wilkins (U. S. Marine Corps Base, San Diego).

831. Balz, A. G. A. Philosophy and psychology. *Psychol. Rev.*, 1941, 48, 530-551.—The Southern Society for Philosophy and Psychology symbolizes the conviction that the 2 disciplines have subject matters and tasks which are related in a unique way. A definition of the function and subject matter of psychology shows that the philosopher is most dependent on this science since it is the most searching inquiry concerning existence, and hence an essential basis from which to develop a metaphysics. Conversely, the psychologist is dependent on the philosopher because the richness of psychology's "matter-of-fact" requires for its explanation a corresponding richness of idea and hypothesis.—A. G. Bills (Cincinnati).

832. Baruk, H. Le problème de la volonté. Nouvelles données psychophysiologiques. (The problem of volition. New psychophysiological data.) *J. Psychol. norm. path.*, 1939, 36, 397-423.—In terms of the syndromes of certain organic disorders, the writer indicates how the function of volition is influenced by biological (e.g. toxic) factors.—F. W. Finger (Brown).

833. Beck, L. W. William Stern's philosophy of value. *Personalist*, 1941, 22, 353-363.—This is a discussion of the application of Stern's views to 2 metaphysical problems. The problems treated are the dualism between the self-values of the person and the irreducibly valuable things which the person experiences, and the dualism between value and existence. Finally, Stern's theory is applied to ethics with a discussion of "practical introception" of values.—N. R. Bartlett (Brown).

834. Boring, E. G. An operational restatement of G. E. Müller's psychophysical axioms. *Psychol. Rev.*, 1941, 48, 459-464.—A re-examination of the first 3 of these psycho-physiological axioms, formulated in 1896, indicates that the psychophysical parallelism, or, in modern terminology, psycho-neural iso-morphism, which is implied in them, is capable of being translated operationally into good physiology of the 1941 brand. It is not incompatible with a positivistic monistic point of view. Certain assumptions of a reversible relationship must be revised, however.—A. G. Bills (Cincinnati).

835. Brett, G. S. The psychology of William James as a basis for his philosophy. *J. Phil.*, 1941, 38, 673.—Abstract.

836. Brown, C. W. A simple apparatus for measuring recovery from glare stimulation. *J. gen. Psychol.*, 1941, 25, 421-428.—An apparatus is described from which the index of recovery from glare stimulation is "the time required by the subject to recover after stimulation to the point that he can correctly recognize a target presented under conditions of low illumination." A sketch of the apparatus and a wiring diagram are presented; the testing procedure is described, and the reliability of the test is discussed. There is a discussion of the visual processes measured with this gadget.—C. N. Cofer (George Washington).

837. Cattell, J. [Ed.] Biological symposia. Vol. II. Speciation, defense mechanisms in plants and animals, biological basis of social problems, and regeneration. Lancaster, Pa.: Jaques Cattell Press, 1941. Pp. 280. \$2.50.—The volume contains 24 papers contributed to 4 symposia. 8 papers discuss speciation, 3 papers, defense mechanisms against foreign substances in plants and in vertebrates. 6 papers on the biological basis of social problems include a plea for the study of human nature as a natural science (W. E. Ritter), a parallel between physiological and social integration (C. M. Child), an argument for general interpretations of biological papers (F. B. Sumner), a statement of the need for an ethics of enmity (S. J. Holmes), and a discussion of religion as a factor in social evolution (E. B. Copeland). 5 contributions on regeneration conclude the volume.—H. Peak (Randolph-Macon).

838. Cattell, R. B. Francis Aveling: 1875-1941. *Amer. J. Psychol.*, 1941, 54, 608-610.—Obituary and appreciation.—D. E. Johannsen (Skidmore).

839. Cogan, D. G. A simplified entoptic pupilometer. *Amer. J. Ophthal.*, 1941, 24, 1431-1433.—A simple pupillometer is described which consists of a series of paired holes of increasing separation (1 to 8 mm., in 0.5 mm. steps). The patient is instructed to find that pair of holes which produces tangential luminous discs against a light background. The distance between that pair indicates the pupillary size.—D. J. Shaad (Lawrence, Kansas).

840. Conklin, E. S. William Henry Burnham: 1855-1941. *Amer. J. Psychol.*, 1941, 54, 611-612.—Obituary.—D. E. Johannsen (Skidmore).

841. Crile, G. W. Intelligence, power and personality. New York: Whittlesey House, 1941. Pp. vi + 347. \$3.00.—This is a semi-popular account of the results of Crile's expeditions and other studies in search of an energy formula for man which would distinguish him from lower animals. "Intelligence, power, and personality are due to the absolute and relative size of the brain, the thyroid gland, the

heart and blood volume, the celiac ganglia and plexuses, and the adrenal-sympathetic system." The unique development of brain, thyroid gland, and manipulative hand in man accounts for his cultural superiority over other forms. "Haeckel's law, that ontogeny repeats phylogeny, interprets the unique behavior of the human being during childhood, adolescence, and the adult stage." "Affection between mother and child, protection of the young, a taste or distaste for food, hunger, thirst, seeking shelter from rain and wind, trust and distrust, attraction and repulsion, pity, cruelty, cheating, lying, stealing, killing—these inherited integrations of the nervous system not only had such survival value. . . as to be transmitted from one generation to another over the protoplasmic bridge but are even today an integration to civilized man."—*D. K. Spelt* (Mary Baldwin).

842. Delgado, H., & Ibérico, M. *Psicología*. (Psychology.) (3rd ed.) Lima: Editorial Lumen, 1941. Pp. 327.—See VIII: 2394.—*H. D. Spoerl* (American International College).

843. Diehl, H. T. An electro-dynamic oscillograph: a tone-writer. *Amer. J. Psychol.*, 1941, 54, 577-579.—*D. E. Johannsen* (Skidmore).

844. Diehl, H. T., & Stoddard, S. E. A punch-board maze and pattern board. *J. gen. Psychol.*, 1941, 25, 429-430.—*C. N. Cofer* (George Washington).

845. Dodge, H. L. [Ed.] Abstracts of theses for higher degrees conferred by the University of Oklahoma in 1938. *Univ. Okla. Bull.*, 1941, N. S. 850.—Theses of psychological interest abstracted are: L. W. Aderhold, Juvenile delinquency, its prevalence and treatment in Oklahoma; S. T. Booth, The educational achievement of working and non-working students in Chickasha; L. S. Boyles, A study of the need and facilities for speech correction in Oklahoma elementary and secondary schools for the school year of 1937-38; M. Erwin, Problems of the high school girls in Pauls Valley, Oklahoma; H. D. Gound, A comparative study of the mental abilities and achievements of the white children in Achille, Oklahoma, and the Negro children in the Shoemaker School, Colbert, Oklahoma; V. M. Jayne, Personality and social maladjustment of sixth grade children in Oklahoma City; V. N. Livesay, The learning ability of second grade children as determined by achievement levels; B. F. McMullen, A study of a maladjusted group of junior high school children; T. V. Sherman, Individual differences in achievement of boys and girls in the Ada Junior High School; N. M. Thompson, Problems of high school girls; C. Evans, An experimental test of the concept of telepathy; V. H. Smith, An investigation of certain aspects of the level of aspiration.—*M. O. Wilson* (Oklahoma).

846. Dunlap, J. W. Recent advances in statistical theory and applications. *Amer. J. Psychol.*, 1941, 54, 583-601.—The author comments on the tremendous increase in the number of articles dealing with statistics as applied to education and psychology,

and the spread in the journals which publish such articles. The present review classifies 131 books and articles published mostly within the last 3 years and critically evaluates them. The 14 categories considered, followed by the number of references, are: reviews and bibliographies, 4; degrees of freedom, 1; analysis of variance, 6; experimental design, 6; practical problems in sampling, 6; theoretical problems in sampling, 4; tests of significance, 19; probability, 6; causation, 1; correlation, 14; prediction, 2; factor analysis, 33; calculation, 17; tests, scaling, construction, and scoring 12. The paper ends with a summary of some of the errors made by psychologists who are attempting to use statistical methods in the analysis of their data.—*D. E. Johannsen* (Skidmore).

847. Edwards, A. S. Static ataximeter for head and hips. *Amer. J. Psychol.*, 1941, 54, 576-577.—*D. E. Johannsen* (Skidmore).

848. Ezekiel, M. *Methods of correlation analysis*. (2nd ed.) New York: Wiley & Sons, 1941. Pp. xix + 531. \$5.00.—Almost all of the patterns of dependency are treated in degrees of precision from graphic approximation to exact mathematical determination. An introductory section on variability and reliability orients the untrained worker. The next section deals with the determination of functional relations between two variables (1) by the use of averages, (2) according to the straight-line function, and (3) for curvilinear functions. The third section treats of change in a variable when two or more variables change (1) by successive elimination, (2) by cross classification and averages, (3) by use of the linear regression equation, and (4) by the use of curvilinear regression. Chief topics treated in the remainder of the book are short-cut methods for determining regression curves, non-quantified variable relations, reliability of prediction, sample selection, and "joint" functions. The text proper closes with chapters on the application of correlation to fields other than agriculture and experimental design. The appendices provide methods of computation, graphs for adjusting measures of correlation, derivation of basic formulas, and a glossary of essential equations. (See V: 2963 for the 1st ed.)—*L. Kogan* (Rochester).

849. Fay, P. J., & Middleton, W. C. The De Pauw laboratory for research on the psychological problems of radio. *Amer. J. Psychol.*, 1941, 54, 571-575.—*D. E. Johannsen* (Skidmore).

850. Grinstead, A. D. A chair-stabilometer. *Amer. J. Psychol.*, 1941, 54, 564-568.—An apparatus for recording the movement of all or part of the body without his being aware that records are being made.—*D. E. Johannsen* (Skidmore).

851. Gundlach, R. H. The Berkeley meeting of the Western Psychological Association. *Amer. J. Psychol.*, 1941, 54, 607.—*D. E. Johannsen* (Skidmore).

852. Herold, C. M. Critical analysis of the elements of psychic functions. Part I. *Psychoanal. Quart.*, 1941, 10, 513-544.—This is the first of a

series of 3 articles in which the author systematically reviews and discusses the terms and concepts employed in the study of psychological behavior as a measure of defining and clarifying them, delimiting their applications, and disclosing their inadequacies and deficiencies.—*M. H. Erickson* (Eloise Hospital).

853. Heu, P. L. On the problem of rank and the limiting distribution of Fishers's test function. *Ann. Eugen., Camb.*, 1941, 11, 39-41.—*J. W. Dunlap* (Rochester).

854. Heu, P. L. Canonical reduction of the general regression problem. *Ann. Eugen., Camb.*, 1941, 11, 42-46.—The general regression problem, formulated as the task of testing the hypothesis H , is changed to that of testing the hypothesis h by means of a transformation of the variables. The product moments of the new variables introduced are expressed as functions of the original variables by means of matrix equations.—*J. W. Dunlap* (Rochester).

855. Hunter, W. S. Research interests in psychology. *Amer. J. Psychol.*, 1941, 54, 605-607.—This is an analysis of the 6557 abstracts of books and articles dealing with psychological problems published in Volume 13 (1939) of the *Psychological Abstracts*. Omitting the non-Association contributions in the sections on the nervous system and on the functional disorders, 30% of all contributions were by members and associates of the American Psychological Association. A table is given showing the number of members, associates, and all others contributing to each of the 14 topical sections into which the *Abstracts* is classified.—*D. E. Johannsen* (Skidmore).

856. Hunter, W. S. On the professional training of psychologists. *Psychol. Rev.*, 1941, 48, 498-523.—Since psychology is a natural science, the research function of psychologists is paramount. But increasing service rendered non-academic fields must be recognized in their training. The influence of professional organization on the development of chemistry, physics, and biology has been much greater than on that of psychology. Undergraduate training in the latter has been influenced by desire to attract students as well as give sound training. But the curricula of the most competent departments show least variety. Selection of students at the graduate level should be in terms of scholarship, competence in research, and personality. The merits of the General Record Examination and the Advanced Subject Test for Graduate students are discussed. A survey of graduate curricula in 14 leading psychology departments is given. The following ways of improving psychological training are given: better scientific standards of undergraduate instruction; more basic training in biology, chemistry, mathematics, and physics for graduates; a common body of psychological skills and knowledge for both academic and non-academic careers; and the establishment of post-graduate internships as a required stage for professional advancement.—*A. G. Bills* (Cincinnati).

857. Johannsen, D. A. The principles of psychophysics with laboratory exercises. Saratoga Springs, N. Y.: Author, 1941. Pp. v + 243. \$2.30.—This book attempts to present some of the problems and methods of psychophysics and to relate them to the elementary statistical procedures, particularly those commonly used in experimental education. There are 6 chapters, 12 presentations of material in tabular form, 4 tables of various functions, and 467 titles in the list of references. Among the more important subjects discussed in the book are: units of measurement, Weber and Fechner laws, errors of observation and the law of probability, types of errors, instructions and attitude, the psychophysical methods with applications to other fields, and a set of 25 experiments illustrative of the various psychophysical methods discussed earlier. The edition is lithographed.—*H. Helson* (Bryn Mawr).

858. Loomba, R. M. Henri Bergson. *Prabuddha Bharata*, 1941, August. Pp. 5 in reprint.—Biography, philosophy.—*H. L. Ansbacher* (Brown).

859. Miner, J. B. The past ten years of psychology in the Southern Society for Philosophy and Psychology. *Psychol. Rev.*, 1941, 48, 552-564.—The membership has increased from 138 to 274. 75% are members or associates in the APA. The efforts of the Society to improve qualifications of psychology teachers in the South have increased the number of those with Ph.D.'s in this group from 66 to 242. An analysis of the contributors and the character of their contributions to the programs shows an important contribution to the development of current movements in systematic psychology, to the logic of science, and to experimental discoveries and hypotheses.—*A. G. Bills* (Cincinnati).

860. Mosier, C. I. A short cut in the estimation of the split-halves coefficients. *Educ. psychol. Measmt.*, 1941, 1, 407-408.—A short cut method for computing reliability coefficients by the split-halves technique is reported.—*P. S. de Q. Cabot* (Simmons).

861. Osborne, J. G. On the precision of estimates from systematic versus random samples. *Science*, 1941, 94, 584-585.—One of the requirements of the mathematical model upon which modern sampling theory is based is that there must be at least 2 independently and randomly selected observations in each of the strata sampled. In previous work with which the author was concerned there was employed a method of selecting samples which does not satisfy the requirement of randomness and independence. In considering this problem the question was asked: "What is the effect of introducing the requirement that there be at least 2 randomly chosen observations in each stratum sampled?" Tests of land cover types revealed that the removal of this requirement and the selection of observations in a systematic manner resulted in gains in efficiency; these frequently amounting to more than 100%. A discussion of the reason for this gain in efficiency is given, and it is shown that, given the

results of a single sample (systematically selected), the results of any other such sample can be predicted with considerable precision. The method of obtaining an estimate of the precision of prediction is given.—*F. A. Mote, Jr.* (Connecticut).

862. Ruch, T. C. *Bibliographia primatologica: a classified bibliography of primates other than man. Part 1. Anatomy, embryology and quantitative morphology; physiology, pharmacology and psychobiology; primate phylogeny and miscellanea.* Springfield, Ill.: Charles Thomas, 1941. Pp. xxvii + 241. \$8.50.—J. F. Fulton contributes an introduction to this classified bibliography of 4,630 entries. Of these entries 669 concern experimental and observational psychobiology and 175 concern miscellaneous bibliographies. 156 titles prior to 1800 are given. The volume terminates as of 1938. An index of authors is provided.—*W. S. Hunter* (Brown).

863. Salmon, E. *Philosophy and order in psychology.* *New Scholast.*, 1942, 16, 70.—Abstract.

864. Schoenfeld, N. The metaphor of 'closure.' *Psychol. Rev.*, 1941, 48, 487-497.—There are few good critical papers on Gestalt psychology due to the lack of clearly defined concepts. An example is the use of the concept of 'closure,' which was first used to describe an actual perceptual phenomenon, and hence set a legitimate problem for psychology. But the term was never adequately defined; yet it has been used as an explanatory concept on other levels with no apparent justification. Examples are its use to indicate mastery of a learning problem, solution of thought problems, goal attainment in instinctive behavior, seeing the point of a joke, etc. Attempts to explain 'closure' adequately on a physiological basis are lacking.—*A. G. Bills* (Cincinnati).

865. Schrek, R., & Lipson, H. I. Logarithmic frequency distributions. *Hum. Biol.*, 1941, 13, 1-22.—"Many asymmetrical arithmetic distributions yield symmetrical logarithmic frequency curves. In such cases the symmetrical logarithmic curve with its constants appeared to be a more satisfactory and convenient method of analysis."—*N. R. Bartlett* (Brown).

866. Seashore, C. E. The term "euthenics." *Science*, 1941, 94, 561-562.—It is suggested that the word euthenics (defined as the science or art of living well or wise living) be used as the single technical term to denote scientific procedures concerned with the theoretical and practical aspects of child welfare and child development.—*F. A. Mote, Jr.* (Connecticut).

867. [Various.] *Zum Andenken an Eugen Bleuler* (30. April 1857-15. Juli 1939). (In commemoration of Eugen Bleuler [April 30, 1857-July 15, 1939].) *Schweiz. Arch. Neurol. Psychiat.*, 1941, 46, 1-32.—These are addresses given at a memorial meeting of the Zurich Psychiatric and Neurological Society, February 9, 1940. M. Minkowski, the president, gives an appreciation of Bleuler's personality and scientific work; H. W. Maier, an account of his life and professional ac-

tivities. H. Binswanger treats of his philosophy. E. Minkowski pays tribute as a pupil and represents the Paris Faculty of Medicine and the Medico-psychological Society. F. Braun speaks for the Swiss Psychiatric Society. Portrait.—*M. E. Morse* (Baltimore, Md.).

868. Volkman, J., & Keller, K. S. An automatic device for providing motivation and reinforcement in operant conditioning. *Amer. J. Psychol.*, 1941, 54, 568-571.—*D. E. Johanssen* (Skidmore).

869. Wherry, R. J. An extension of the Doolittle method to simple regression problems. *J. educ. Psychol.*, 1941, 32, 459-464.—An extension of the Doolittle method is described which is said to have the following advantages. "(1) The . . . method is shorter because it actually involves fewer arithmetical operations (if checking be required for all methods). (2) The . . . method is shorter because it is more systematic, not requiring frequent shifts of set from one type of formula to another. (3) The checks are more certain and convincing since resolving a formula is always apt to lead to repetition of the same errors, while the Doolittle checks are not subject to this type of error. (4) The replacing of a variety of simple and complex (to the beginner) formulae by a single simple self-checking method should simplify the training of statistical clerks. (5) When the beginner has mastered the technique involved, he is immediately able to solve multiple correlation constants in precisely the same manner with little further training, a condition which is not true as a result of the other approach."—*J. W. Macmillan* (Maryland).

[See also abstract 1181]

NERVOUS SYSTEM

870. Bonin, G. v. Side lights on cerebral evolution: brain size of lower vertebrates and degree of cortical folding. *J. gen. Psychol.*, 1941, 25, 273-282.—By mathematical treatment of certain data the author shows that "the higher we go in the phylogenetic scale . . . the more rapidly brain size increases with bodily size." It is also indicated by this treatment that man's brain is not relatively larger than that of some monkeys; man's superiority to monkeys "lies in the fact that the degree of folding and with it the mass of the cortex is a function of the absolute size of the brain." Methods are described for the analysis of the amount of folding of the cortex, and some data are presented. It is seen "that the folding of man's cortex follows the same phylogenetic laws as that of mammals in general." Man's mental superiority is due to the progressive differentiation of his brain.—*C. N. Cofer* (George Washington).

871. Brücke, E. T. v., & Early, M. On the alleged synchronization of proprioceptive impulses within spinal ganglia. *J. Neurophysiol.*, 1941, 4, 507-511.—The experiment was designed to test the conclusion of Kayser that discrete and irregular

impulses produced in a sensory nerve by stretching a muscle become synchronized in the spinal ganglion. No synchronizing action of the spinal ganglion was found in a new experiment or in an experiment which duplicated Kayser's.—*D. B. Lindsley* (Brown).

872. Brücke, E. T. v., Early, M., & Forbes, A. **Fatigue and refractoriness in nerve.** *J. Neurophysiol.*, 1941, 4, 456-472.—Recovery of excitability of frog sciatic nerve was studied after one or two conditioning shocks, after prolonged tetanization, and in experiments combining prolonged activity and refractoriness. Excitability is reduced to a greater extent in resting nerve than in nerve already refractory. The different alpha fibers of a given nerve do not vary in fatigability. The appearance of supernormal or subnormal phases in response are delayed by fatiguing stimulation and depend upon the degree of previous activity. Recovery of excitability after a single conditioning shock is faster than after two conditioning impulses, although if the latter impulses are separated in time they may result in a more rapid recovery to the second impulse. Delay of recovery from a second refractory producing impulse is one of the first signs of fatigue.—*D. B. Lindsley* (Brown).

873. Dusser de Barenne, J. G., Garol, H. W., & McCulloch, W. S. **The "motor" cortex of the chimpanzee.** *J. Neurophysiol.*, 1941, 4, 287-303.—This study reports motor response to electrical stimulation of various cortical areas of 9 chimpanzees. A detailed map of stimulation points with corresponding motor responses is presented. The results are described in terms of the functional organization of the cortex in responsive bands. Particular attention is given to "suppressor bands"; 4 of these are described which, when stimulated, suppress activity previously initiated in other areas. A wider range of motor points, both in motor and sensory areas, was found than in previous studies; this was believed to be due to the fact that the present investigators were aware of the action of suppressor areas and thus avoided stimulating such regions until other areas had been tested. Most of the cortical areas which yield sensory responses on stimulation also give motor responses; there is a wide overlapping of sensory and motor functions.—*D. B. Lindsley* (Brown).

874. Dusser de Barenne, J. G., Garol, H. W., & McCulloch, W. S. **Functional organization of sensory and adjacent cortex of the monkey.** *J. Neurophysiol.*, 1941, 4, 324-330.—This study utilizing strychnine as a stimulus and electrical recording techniques to indicate the spread of response is supplementary to a previous, more extensive investigation of functional organization in the sensory cortex. The subject of investigation in this study was chiefly the function of areas immediately surrounding the sensory cortex; two of these, 8s and 19s, representing anterior and posterior margins, were shown to be excited by strychnine, but to have a suppressing effect on activity in the cortical sensory areas.—*D. B. Lindsley* (Brown).

875. Dusser de Barenne, J. G., & McCulloch, W. S. **Functional interdependence of sensory cortex and thalamus.** *J. Neurophysiol.*, 1941, 4, 304-310.—The spontaneous electrical activity recorded from a local region of the sensory cortex in monkeys remains undisturbed by decapitation, decerebration, section of corpus callosum, and resection of adjacent areas of the cortex. Lesions of the basal ganglia and even of parts of the sensory thalamic nuclei, other than those directly associated with the cortical area from which records are being obtained, do not impair the spontaneous activity of the local region of sensory cortex. On the other hand, a lesion of the thalamus corresponding to the cortical area in question will abolish or greatly diminish the electrocortical activity. Similarly, destruction of the cortical area will reduce the spontaneous activity of the corresponding area of the thalamus. Previous studies have shown that superficial layers of the cortex, destroyed by thermocoagulation, are not essential to the maintenance of normal electrocorticograms. It is therefore concluded that the deeper layers of the cortex and the thalamo-cortico-thalamic connections are essential to the maintenance of normal spontaneous electrical activity of the cortex.—*D. B. Lindsley* (Brown).

876. Dusser de Barenne, J. G., & McCulloch, W. S. **Suppression of motor response obtained from area 4 by stimulation of area 4s.** *J. Neurophysiol.*, 1941, 4, 311-323.—A series of experiments are reported which were designed to answer the question of why and how electrical stimulation of a small area at the anterior margin of area 4 (4s) suppresses electrical activity as well as motor response initiated by stimulation of area 4. The duration of the suppression is long as is the latency of the effect. The suppression is not an effect transmitted directly through the cortex, but rather through sub-cortical centers, presumably by way of a loop circuit through caudate nucleus, thalamus, and cortex.—*D. B. Lindsley* (Brown).

877. Gasser, H. S. **The classification of nerve fibers.** *Ohio. J. Sci.*, 1941, 41, 145-159.—This is a summary of studies on the recorded characteristics of nerve fiber conduction. Conduction velocity shows an approximately linear relationship to axon diameter throughout the entire range of myelinated fibers. With respect to other characteristics, however, no such continuity can now be demonstrated.—*D. K. Spelt* (Mary Baldwin).

878. Householder, A. S. **A theory of steady-state activity in nerve-fiber networks: III. The simple circuit in complete activity.** *Bull. math. Biophys.*, 1941, 3, 137-140.—"Continuing the investigation previously introduced it is shown here that, when the product of the activity parameters of the circuit is not exceeded by unity (algebraically), a steady state is not possible in which all fibers of the circuit are active, whereas when this product is exceeded by unity, any stimulus pattern which is consistent with such a state of complete activity is

inconsistent with any state of partial activity of the circuit."—*N. R. Bartlett* (Brown).

879. Hugger, H. Zur objektiven Auswertung des Elektrencephalogramms unter besonderer Berücksichtigung der gleitenden Koordination. (Objective evaluation of the electroencephalogram with special reference to relative coordination.) *Pflüg. Arch. ges. Physiol.*, 1941, 244, 309-336.—Van Holst's methods of statistical analysis of the phase relationships of the alpha rhythm were applied to more than 100 persons, including normals and those with brain lesions. The results show that with this method phase coordination of different areas can be proved, and that continuous registration of the duration and amplitude of the phases allows conclusions as to the distant influencing rhythms. The periodical variations in occipital alpha rhythm lead to the conclusion that these are influenced by other rhythms, perhaps subcortical. The mechanism of this coordination is unknown. The influenced rhythm is the slower. An attempt was made to deduce the frequency of the influencing rhythms from the difference in frequency of the alpha rhythm and the periodical variations, which in the healthy adult (awake) are 6-8 per sec. Patients with brain lesions show greater variations in the duration and amplitude of the phases.—*M. E. Morse* (Baltimore, Md.).

880. Knott, J. R. Electroencephalography and physiological psychology: evaluation and statement of problem. *Psychol. Bull.*, 1941, 38, 944-975.—In Part I the author shows that EEG can provide a measure of physiological activity as related to S, to R, and that activity conditioned by a substratum which can be simultaneously sampled by other available techniques. Part II reviews the studies which used EEG as a technique. The electrical potentials and their properties are described, and the investigations are classified under interindividual and intraindividual variability. Under the former classification the relation of EEG to personality and intelligence as well as EEG constancy are discussed. Intraindividual variability includes a discussion of EEG as related to the stimulus, the response, and other physiological measures. 4 propositions are formulated in Part III as an outgrowth of the various findings that have appeared. Bibliography of 73 titles.—*F. McKinney* (Missouri).

881. Landahl, H. B. Theory of the distribution of response times in nerve fibers. *Bull. math. Biophys.*, 1941, 3, 141-147.—"On the basis of Rashevsky's nerve excitation equations, an expression is derived for the distribution of response times attributing the variation to the fluctuations in threshold. The resulting equation is compared with available data and agreement is found."—*N. R. Bartlett* (Brown).

882. Liberson, W. Recherches biométriques sur les électroencéphalogrammes individuels. (Biometrical studies of individual electroencephalograms.) *Contr. Inst. Biol. Univ. Montréal*, 1941, No. 9, 1-19.—In a study carried out for purposes

of professional selection it was found that subjects showing dominant alpha patterns are superior to those in the "subdominant" and "mixed" categories.—*C. H. Graham* (Brown).

883. Libet, H. & Gerard, R. W. Steady potential fields and neurone activity. *J. Neurophysiol.*, 1941, 4, 438-455.—A stated hypothesis concerning the transmission of potential waves along the hemisphere of the isolated frog brain, even after neural connections are blocked or severed, to the effect that the potential wave depends upon intercellular potentials was put to experimental test. Steady potentials between the surface layer (pia) and the inner ventricular surface of the hemisphere were observed; the pial surface was negative to the ventricular, and the potential amounted to about 2 to 3 millivolts. The travelling waves of potential induced at the surface of the brain by caffeine modify the magnitude and polarity of the steady potential, as does polarization with weak electric currents. It is stated that neurones in the frog brain are oriented alike, with dendrites directed to pial surface and axones emerging on the ventricular surface of the hemisphere. The steady potential fields are due to polarization of groups of neurones from dendrites to axones. The importance of intercellular currents in synchronizing the action of many neurones, especially as such currents can be modified by shifts in the steady potential state of the cell layers, is thought to be related to mass functioning of the cortex and spontaneous potentials of the brain.—*D. B. Lindsay* (Brown).

884. Masserman, J. H. The functions of the hypothalamus in the cat: destruction experiments. (Film.) Bethlehem, Pa.: Psychological Cinema Register, 1940. 290 ft. \$14.50.—Animals which have recovered from bilateral lesions of the hypothalamus show, immediately after operation, stupor, hyperreflexia, hypertonicity, and catalepsy. The responses usually associated with emotion are fragmented. Later, characteristic jumping, climbing, and stalking movements appear. Finally there is almost a complete recovery of sympathetic motor functions, except for a raised threshold to natural emotional stimuli (live mouse or dog). Injection of sodium amytal diminishes the reactivity of the hypothalamic vegetative centers. The author concludes that the hypothalamus is largely an efferent discharge route for the reflexes associated with emotion.—*A. Ford* (Lehigh).

885. Masserman, J. H. The functions of the hypothalamus in the cat: the effect of electrical stimulation. (Film.) Bethlehem, Pa.: Psychological Cinema Register, 1940. 250 ft. \$12.50.—The stereotactic technique for inserting needle electrodes and the insertion of the Horsley-Clark apparatus are pictured. The behavior of freely-moving recovery animals, with electrodes still attached, is pictured following faradic stimulation. The responses consist of mydriasis, piloerection, vocalizations, clawing and running movements, and other sympathetic motor reactions often associated

with fear and rage. This film is adapted to research demonstration rather than elementary instruction.—*A. Ford (Lehigh).*

886. *Neff, W. D., Smith, K. U., & Kappauf, W. E.* The technique of brain surgery on the cat with observations on vestibular dysfunction after sectioning the eighth nerve. (Film.) Bethlehem, Pa.: Psychological Cinema Register, 1940. 320 ft. \$16.00.—A complete surgical operation, for the exposure of the cat's brain, is pictured in detail. In later portions of the film there are shown the characteristic symptoms of the vestibular syndrome. In the unilateral lesions there are shown: (1) temporary rolling toward the side of the lesion, (2) permanent rotation of the head toward the side of the lesion, (3) air righting reflexes toward the side of the lesion, (4) slight decreases of tonus of the homolateral limb muscles. Bilateral lesions are followed by: (1) initial violent head rotation, (2) hyperextension, (3) inability to stand, (4) temporary defects in tactual placing reactions of the fore limbs. In both instances there is a gradual and sometimes almost complete recovery of behavior. An animal is shown with the cerebellum removed immediately over the eighth nerve, and exhibiting slow forward progression but no other symptoms. Normal cats are presented for comparison.—*A. Ford (Lehigh).*

887. *Offner, F., Weinberg, A., & Young, G.* Nerve conduction theory: some mathematical consequences of Bernstein's model. *Bull. math. Biophys.*, 1940, 2, 89-103.—"The generally accepted permeability theory of nerve conduction is presented in mathematical form. The resulting velocity formula is found to agree well with data on squid giant axon, but predicts velocities considerably too high in the case of Nitella. The dependence of velocity on fiber diameter is discussed for both medullated and non-medullated nerve, it being shown theoretically that velocity is proportional to the square root of diameter for non-medullated and to the diameter for medullated nerve. The equations relating the shape of the action spike to the observed permeability changes are given but are not solved."—*N. R. Bartlett (Brown).*

888. *Shmelvkin, D. G.* [Electroencephalogram and its clinical significance; clinical observations on the localization of the alpha rhythm.] *Sovetsk. Psikhonevrol.*, 1940, 16, No. 5/6, 82-90.

889. *Smith, K. U.* Behavior disturbances after bilateral removal of the frontal areas in cats. (Film.) Bethlehem, Pa.: Psychological Cinema Register, 1940. 350 ft. \$17.50.—Two groups of cats are pictured: animals with the entire frontal cortex removed and those with a frontal lobectomy exclusive of motor regions. Both groups showed: (1) defects in posture and locomotion, in part due to hyperextension; (2) defects in mastication; (3) the tendency to follow moving objects; (4) a generalized hyperactivity; (5) impaired ability to acquire skills in the token-reward responses. In the animals with motor regions removed the placing and hopping reactions were abolished, and the impairment of

skills was more pronounced. Kymographic records are shown from the use of the stabilimeter and other behavior-recording devices.—*A. Ford (Lehigh).*

890. *Stanton, H.* A neural mechanism for discrimination: IV. Monocular depth perception. *Bull. math. Biophys.*, 1941, 3, 113-120.—"The mechanism for discrimination described by A. S. Householder is applied to the problem of monocular depth perception, and the Weber ratio is determined. The ratio obtained varies as a small positive power of the distance for near objects, while for distant objects it is indicated that discrimination is relatively impossible."—*N. R. Bartlett (Brown).*

891. *Visitini, F., & Levi-Montalcini, R.* Relazione tra differenziazione strutturale e funzionale dei centri e delle vie nervose nel embrione di pollo. (Relation between structural and functional differentiation of nerve centers and tracts in the chick embryo.) *Schweiz. Arch. Neurol. Psychiat.*, 1939, 43, 381-393; 44, 119-150.—The authors made a comparative study of the histological development of the nervous system and of motility as evidenced by spontaneous movements; mechanical, reflex, electrical, and pharmacological excitability; and chronaxy. The chief conclusions are that, by the time the first movements occur, a complete system of spinal integration exists. The movements are plurisegmental and neurogenic. Spontaneous motility is of endogenous origin, probably due to variations of CO₂ in the blood. This embryonic response is retained normally in the adult only by the respiratory nucleus. Electrical excitability develops at the same time as endogenous. Chronaxy decreases rapidly with muscle differentiation. Before formation of the end plate, curare, eserine, and acetylcholine exercise the same actions as in the adult. Vestibular reaction to rotation appears on the 8th day as nystagmus. The authors have established the relationship between the first cutaneous reflexes and the first plurineuronic arc, and between proprioceptive muscle reflexes and the 2-neurone arc, distinctions probably preserved in the adult.—*M. E. Morse (Baltimore, Md.).*

892. *Weinberg, A. M.* The equivalence of the conduction theories of Rashevsky and Rushton. *Bull. math. Biophys.*, 1940, 2, 61-64.—"The one-factor, semi-formal nerve conduction theory of Rashevsky and the dynamical theory of Rushton are shown to be completely equivalent."—*N. R. Bartlett (Brown).*

[See also abstracts 925, 936, 946, 966, 971, 979, 1274.]

RECEPTIVE AND PERCEPTUAL PROCESSES

893. *Babbitt, J. A.* Progressive deafness, otosclerosis, and closely related subjects. An abstract of the available literature published during the year 1939. *Laryngoscope, St Louis*, 1940, 50, 385-451.—Bibliography of 100 titles.—*C. K. Trueblood (Cambridge, Mass.).*

894. *Babbitt, J. A., & Silcox, L. E.* Progressive deafness, otosclerosis, and closely related subjects.

An abstract of the available literature published during the year 1940. *Laryngoscope, St Louis*, 1941, 51, 399-433, 516-564.—Bibliography of 93 titles.—C. K. Trueblood (Cambridge, Mass.).

895. Barondes, R. deR. Night blindness: its treatment with vasodilating drugs. *Med. Rec., N. Y.*, 1941, 154, 427-428.—The author summarizes the general facts of hemeralopia, stresses that its causes are varied and may be direct or indirect, and points out that frequently spastic disorders of the retinal arterioles are at the basis of the condition. Use of vasodilating drugs may then correct the vascular condition and thus the hemeralopia.—M. H. Erickson (Eloise Hospital).

896. Bellamy, B. R., & Newhall, S. M. Attributive limens in selected regions of the Munsell color solid. *J. opt. Soc. Amer.*, 1941, 31, 757-758.—Abstract.

897. Bourdon, B. La théorie des sensations chez Descartes. (Descartes' theory of sensations.) *J. Psychol. norm. path.*, 1939, 36, 321-343.—Descartes recognized 2 classes of senses: the "internal" included the various "natural appetites" (e.g. hunger and thirst) and the emotions (referable to the soul and some movement of the "animal spirits"); the "external" senses were touch, taste, smell, hearing, and sight. Sensation in general is a function of the soul, rather than of the body, although the nervous system mediates this function; sensation is a product of thought, which is the essence of the soul. In the development of his theory, the influence of both Descartes' metaphysical conceptions and his scientific experience may be seen. The theory emphasizes the dualism of object and sensation, recognizing the subjectivity of the latter. The distinction is further made between primary qualities (color, sound, etc.) and secondary qualities of matter (size, shape, movement, etc.).—F. W. Finger (Brown).

898. Britten, R. H. Blindness, as recorded in the National Health Survey; amount, causes, and relation to certain social factors. *Publ. Hlth Rep., Wash.*, 1941, 56, 2191-2215.—This is a report presenting the data on blindness obtained among the urban population of the National Health Survey, a house-to-house canvass of more than 700,000 urban families (2,498,180 white and colored persons of known age) in 18 States and 83 cities, made from November 1935 to March 1936. The report is concerned with: gross prevalence, sex and age, causes of blindness, cause and sex, cause and age, color (race), geographic area and size of city, economic status, and employment status.—J. E. Zerga (U. S. Employment Service).

899. Byram, G. M. The polarization of atmospheric haze. *Science*, 1941, 94, 192-193.—Experiments with colored polarizing screens indicate that the polarization of air-light may be of importance in the detection of forest fire smokes from high mountain lookout points. A polarizing screen and red filter serve to increase the visual range, because under favorable conditions this combination removes the polarized fraction of the atmospheric

haze. This combination will not penetrate fog or haze caused by particles of condensed water vapor suspended in the air, it cannot be employed on cloudy days, and its use is restricted to certain directions with respect to the sun.—F. A. Mote, Jr. (Connecticut).

900. Crowden, G. P., & Lee, W. Y. Sensations of heat and moisture. *Chin. J. Physiol.*, 1940, 15, 475-483.—(*Biol. Abstr.* XV: 10466).

901. Cruikshank, R. M., & Feigenbaum, E. A note on the influence of praise and reproof upon size constancy. *J. exp. Psychol.*, 1941, 29, 524-527.—Ascending and descending (method of limits) determinations were made in which a standard gray cardboard square of 15 cm. was equated in size to one of a series of gray cardboard squares which were graduated in size in half-centimeter steps between the limits of 11 and 20 cm. Results obtained under praise and under reproof were compared with those obtained under 'control' conditions. A slight tendency was manifested for praise to be attended by an increase and reproof by a decrease in the constancy ratios. The results are deemed too limited to "answer the question whether either praise or reproof given alone over a period of time will lead to the same trend in the constancy quotient or whether there might be some evidence of the upward trend like that of the synthetic attitude if praise alone were given."—M. J. Zigler (Wellesley).

902. Edridge-Green, F. W. Vision and colour-vision. *Chem. & Industr., Lond.*, 1940, 59, 567-571.—(*Biol. Abstr.* XV: 23547).

903. Falbe-Hansen, J. Clinical and experimental histological studies on the effects of salicylate and quinine on the ear. *Acta oto-laryng.*, 1941, Suppl. 44. Pp. vi + 209.—In man, quinine and salicylate produce a sound-conduction type of deafness together with tinnitus, sensation of pressure, vertigo, and spontaneous nystagmus. Histological studies of quinine- and salicylate-treated guinea pigs have shown changes in the ganglion cells of the spiral ganglion, in the organ of Corti, and in the position of the membranes.—L. A. Riggs (Brown).

904. Fisher, M. B. Time relations in the effect of a surrounding field on foveal critical flicker frequency. *J. exp. Psychol.*, 1941, 29, 483-496.—The experiments here described were conceived so as to provide a test for the view suggested by Cobb and elaborated by Ross that the result of the initial photosensory reaction is the production of a V-substance which is freely diffusible in the retina and which acts so as to hasten the resynthesis of the photosensory substance. Limens were determined by combining flicker-to-fusion and fusion-to-flicker values obtained both with a bright field and with a dark field surrounding the test-area. Trials were made with 4 lengths of alternation intervals: 4 minutes, 2 minutes, 1 minute, and 20 seconds. Increase in the magnitude of the interval of alternation was attended by an increasing difference between critical flicker frequency for the dark as compared with the bright surround. It is asserted

that no mechanism of neural interaction in the optic system can account for this finding, which, however, is deemed critical evidence for the V-substance hypothesis.—*M. J. Zigler* (Wellesley).

905. **Griffin, D. R., & Galambos, R.** The sensory basis of obstacle avoidance by flying bats. *J. exp. Zool.*, 1941, **86**, 481-506.—The sensory control of obstacle avoidance during flight in a standard test situation has been determined by means of temporary deprivation procedures (gagging to prevent production of supersonic notes, blindfolding, plugging the ears). Blindfolded bats avoid obstacles as well as bats under normal conditions. Gagging or plugging of the ears produces large decrements in accuracy of avoidance. Plugging of one ear also increases the frequency of hitting obstacles. "Flying bats detect obstacles in their path by (1) emitting supersonic notes; (2) hearing these sound waves when reflected back to them by the obstacles; and (3) detecting the position of the obstacle by localizing the source of this reflected sound."—*J. L. Kennedy* (Tufts).

906. **Hasama, B.** Ob und in welcher Embryonalzeit wird die Netzhaut des Huhns für verschiedene Strahlen empfindlich? (Does the chick's retina become sensitive to various rays, and at what embryonic stage?) *Pflüg. Arch. ges. Physiol.*, 1941, **44**, 337-346.—No migration of retinal pigment occurs when the eggs are exposed to sunlight or Roentgen, radium, infrared, or ultraviolet rays, or when adrenalin or nicotin is injected into the egg. Migration begins several days after hatching and reaches a maximum at 2 months. The bioelectric reaction to various rays appears late in embryonic life. Comparison of the 2 reactions suggests that pigment migration is first recognizable when the chick actually sees, whereas differences in potential begin as soon as the eye is functionally capable. In contrast to the electrical reaction, pigment migration is perhaps not an integrative part of vision, but accessory to adaptation. The chicken retina contains a substance similar in biochemical properties to histamine, and increased by sunlight and ultraviolet and infrared rays. Hence the possibility exists that retinal currents during radiation may be partly due to the increase of a photochemical process involving histamine or a similar substance.—*M. E. Morse* (Baltimore, Md.).

907. **Ilse, D.** Experiments on the color sense of insects: responses of bees to blue after training. (Film.) Bethlehem, Pa.: Psychological Cinema Register, 1939. 240 ft. \$30.00.—This is a color film picturing the visual discrimination of bees after the method of K. v. Frisch. A piece of plate glass is laid over squares of colored and gray papers of various brightnesses and hues. During the training period the bees are fed on that part of the glass which lies over a blue square. When food is removed, it is demonstrated that the bees have learned to return to blue areas, even after these are changed to chance locations, with brightnesses varied, and surrounded by gray papers of varying

brightnesses. When the blue paper is surrounded by other hues, the bees distinguish the stimulus paper from other hues of longer wave-length, but confuse the blue with violet areas.—*A. Ford* (Lehigh).

908. **Ives, M.** The flight of colors following intense brief stimulation of the eye. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1938. Pp. 134.—See *Microfilm Abstracts*, 1938, No. 1.

909. **Jenkins, W. L.** Studies in thermal sensitivity: 17. The topographical and functional relations of warm and cold. *J. exp. Psychol.*, 1941, **29**, 511-516.—Results obtained in separate alternate stimulations for cold (17° stimulus) and for warmth (44° stimulus) are compared with those obtained when a double stimulator was used to arouse both warmth and cold simultaneously. The simultaneous presence of warmth was found to have no consistent effect on cold reports, but the simultaneous presence of cold produced a 'depression' in warmth reports. This finding is interpreted to support the view of independent receptor systems for the primary thermal qualities.—*M. J. Zigler* (Wellesley).

910. **Luckiesh, M., & Moss, F. K.** The extent of the perceptual span in reading. *J. gen. Psychol.*, 1941, **25**, 267-272.—"The results of these studies indicate (a) that the number of characters per fixation decreases from 8.50 to 7.84 as the type size is increased from 4 to 10 points; and (b) that the span increases from 8.14 to 9.31 characters as the line-length of 10-point matter is increased from 13 to 29 picas. The average of all of our data indicates a span of about 8.5 characters during an 'average' fixation for these readers. The maximum variation from this average value, for any of the conditions studied, is 0.8 of one character per fixation or about 10 per cent of the average value. In view of obvious non-perceptual factors unavoidably introduced by these typographical variations, it seems reasonable to conclude that the number of characters recognized in a 'typical' fixation is substantially independent of type-size and of line-length in the case of readers of the type involved in this research."—*C. N. Cofer* (George Washington).

911. **Nafe, J. P., & Wagoner, K. S.** The nature of sensory adaptation. *J. gen. Psychol.*, 1941, **25**, 295-321.—"Graphic records of the effect of pressure stimulation are presented. The confusion between sensory adaptation and fatigue of end-organ is reviewed. Proof is offered tending to show that adequate pressure stimulation consists only of movement due to the adjustment of tissues, in which end-organs are embedded, to a stimulating object. This adjustment requires time, and it is shown that the time of stimulation and 'adaptation time' coincide. This is interpreted as showing that adaptation is due to loss of effectiveness of the stimulus rather than to any loss on the part of the end-organ. Some of the recent experimental work on the problem is reviewed for the purpose of determining what evidence existed against such a view."—*C. N. Cofer* (George Washington).

912. Nafe, J. P., & Wagoner, K. S. The nature of pressure adaptation. *J. gen. Psychol.*, 1941, 25, 323-351.—An apparatus is described which was designed to lower a weight, at constant speed, upon the skin; graphic recordings were made of the sinking of the weight into the tissue. 2 O's reported when adaptation to this pressure (applied above the knee cap) was complete. Various stimulus areas and weights were employed. Curves for adaptation times were found to correspond closely to the curves for the fall of weights into the skin. The adaptation time increased, for a given area, as the stimulus weight increased and, for a given weight, as the area increased. In neither case, however, was the relationship proportional. The curves for adaptation time were negatively accelerated. For a given weight, area was unimportant to the rate of movement essential to sensation; there were differences in rate of movement for different weights, however. Adaptation does not refer to end-organ or nerve fiber condition, then, but to a failure of stimulation (tissue movement).—C. N. Cofer (George Washington).

913. Neuberger, H. The polarization of atmospheric haze. *Science*, 1941, 94, 485-486.—Byram (see XVI: 899) stated that "when viewed through a combination polarizing screen and red filter, the visual range of distant objects may be considerably increased, because under favorable conditions this filter combination removes a large part of the atmospheric haze." The present author points out that this must allude to the presence of a light colored object before a dark background. Under such circumstances the use of the filter combination results in improvement of visibility rather than increase in visual range. In the situation where the object is dark and its background is clear sky near the horizon and the object is invisible to the unaided eye because of haze, fog, or dust the author finds that in no case did the filter combination render the object visible. In situations where color contrast is of importance, as in spotting ground objects from airplanes, the use of suitable filters may aid in the identification of the objects.—F. A. Mote, Jr. (Connecticut).

914. Nogué, J. Le système de l'actualité. (The system of actuality.) *J. Psychol. norm. path.*, 1939, 36, 344-369.—The utility of a time-table depends upon the establishment of a temporal point of reference for any given application. In our psychological existence there are numerous centers of perspective around each of which is built a temporal system with its own past and future. There is no intuition of time-as-a-whole; if correlations appear to obtain among the several temporal systems, they are the result of artifacts of representation. A psychological analysis must deal not simply with time in general, but should examine the individual systems, trying to establish their detailed characteristics. Each of the systems may be considered a system of actuality, in contrast to the imaginary systems based on memory and prevision. The present study attacks this more limited problem,

with the examination divided into 2 parts: the temporal sense, and the order of time.—F. W. Finger (Brown).

915. Plata, J. La sensibilidad táctil de los ciegos en relación con la de los videntes. (The tactual sensitivity of the blind compared with that of seeing persons.) *Psicotecnia*, 1941, 2, 158-175.—About 5000 subjects, 450 of whom were blind, with a preponderance of males, particularly above age 15 (the total age range being 7-40), were used in this study. Data compared were: the two-point limen, difference thresholds for lifted weights, and difference thresholds for the height of bosses successively presented in relation to a standard. Among children up to 14 years the seeing are superior to the blind; among adults, tactual sensitivity increases in the blind and diminishes in seeing persons. Sex differences are negligible, and there is no evidence favoring the theory of compensatory functioning. The basic factor is that of frequency of occasions for tactual perception, especially early in life.—H. D. Spoerl (American International College).

916. Polyak, S. L. The retina. Chicago: Univ. Chicago Press, 1941. Pp. x + 607. \$10.00.—This book deals exhaustively with the anatomy, histology, and physiology of the retina in man, ape, and monkey. It is divided into 5 main sections dealing with (1) methods for investigating the retina and visual pathway, (2) an historical survey of early investigations of the eye, (3) modern researches, (4) the facts of minute retinal structure, (5) structure and function. Bibliography of 129 pages and an index of 22 pages.—C. H. Graham (Brown).

917. Russell, W. R. The detection of hysterical blindness of one eye. *J. R. Army med. Cps*, 1941, 77, 151-152.—A copy of the Snellen chart was made, with some letters in red and some in black. When a dark red lens is placed over the good eye of a subject who suffers a truly defective eye, the subject will see the black letters but not the red. If the subject is hysteric or malingering, he will read both the red and the black letters.—E. S. Primoff (U. S. Employment Service).

918. Schlosberg, H. Stereoscopic depth from single pictures. *Amer. J. Psychol.*, 1941, 54, 601-605.—The fact that depth perception of a surprisingly striking type can be produced by viewing a single picture through a lens is discussed theoretically. Optimal results are obtained when a photograph is viewed through a lens having the same focal length as the camera lens through which the picture was taken. The cues for flatness and those for depth are reviewed. Depth cannot be conceived of as the mere addition and subtraction of factors of differing importance; they interact, and some of them, e.g. superposition, are all-or-none affairs. "The phenomenon of monocular plastic depth is due to the release of certain monocular factors from overpowering cues, largely binocular, that show the picture to be flat. These 'flatness' cues must be eliminated, and not merely held constant."—D. E. Johanssen (Skidmore).

919. Ségel, J. **Le mécanisme de la vision en lumière intermittente.** (The mechanism of vision in intermittent illumination.) *J. Psychol. norm. path.*, 1939, 36, 451-539.—This critical and experimental report considers the several allied problems under the following headings: the mechanism of vision and the process of homogenization of intermittent stimuli, the response of the cortex to intermittent optical excitation, the relationship between the light and the dark phases, persistence of the excitatory effect, fusion of intermittent excitation of rhythmic pattern, and cortical interference. The writer interprets his results to be in opposition to Adrian's theory, which accounts for fusion on the basis of lag of the primary receptor process. A different hypothesis is suggested, positing an underlying visual process the critical period of which is no greater than 1 ms. Subjective intensity is considered a function of number of elements reacting, rather than of frequency of nerve impulse. Fusion is not the simple result of inertia of organic response. It rather appears to be of a more complex nature, involving interactions between the afferent discharge and the periodic and automatic activity of the cerebral cortex. 57 references are cited.—F. W. Finger (Brown).

920. Sheard, C. **Rod and cone dark adaptation: surveys of normal subjects, and applications to clinical problems.** *J. opt. Soc. Amer.*, 1941, 31, 757.—Abstract.

921. Steggerda, M. **Form discrimination test as given to Navajo, Negro and white school children.** *Human Biol.*, 1941, 13, 239-246.—Series of pairs of triangles, octagons, and circles were presented to children with instructions to select in each pair the more nearly perfect figure. In all cases the octagon tests were the easiest, and the triangles the most difficult. In every age and in each racial group boys performed better than girls. The most striking note on race differences was the very slight improvement, or actual decrement, with age demonstrated by the Navajos. The author suggests the high incidence of trachoma may be the possible explanation for this phenomenon.—N. R. Bartlett (Brown).

922. Timofeev, N. V., & Liubavskaja, A. N. **[Effect of electrorhythmic excitation of the skin on the manifestation of tactile, electrocutaneous, and pain sensibility.]** *Vestn. Otorinolaryng.*, 1940, No. 9, 17-26.

923. Tinker, M. A. **Effect of visual adaptation upon intensity of light preferred for reading.** *Amer. J. Psychol.*, 1941, 54, 559-563.—"The purpose of this experiment is to measure the degree to which the illumination intensity chosen for comfortable reading is determined by the illumination level to which the eye is adapted." The S's were 144 university students. They were adapted to 8 foot-candles at one sitting, and to 52 foot-candles at another. "After adaptation a paired comparison technique was employed to obtain preferences for intensities considered best for ease and comfort in reading 11pt. type. The data indicate that status of visual adapta-

tion at the moment determines to a large degree the intensity preferred for reading. Preference for illumination intensity, therefore, is not a satisfactory method for determining the intensity of light needed for efficient visual work."—D. E. Johannsen (Skidmore).

924. [Various.] **Ten years of Optical Developments.** Chicago: Riggs Optical Co., 1941. Pp. 379. \$2.50.—This volume contains a complete set of the monthly bulletin *Optical Developments* for the period April, 1931 to April, 1941. There are numerous articles on all phases of vision by a great many authors. Papers are both original contributions and abstracts. There is no table of contents but a comprehensive index. A few of the titles of interest to psychologists are: the scope of psychological optics, experiments in stereoscopic vision, influence of yellow coloration on vision, perception of relief, perimetry, legibility of print and type size, the eye motif in delusion and phantasy, the eye in connection with dreams, ocular manifestations of hysteria, and retinal rivalry as a factor in stereoscopic vision. There are also numerous articles on apparatus of various types.—G. S. Speer (Central YMCA College).

[See also abstracts 836, 839, 886, 890, 928, 960, 972, 977, 1076, 1126, 1128, 1133.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

925. Alm, O. W., & Whitnah, C. H. **The brain minerals and learning ability of albino rats.** *J. genet. Psychol.*, 1941, 59, 51-64.—2 groups of rats (total N = 111) were trained to a criterion on 2 mazes. Following training, the brains were analyzed to determine amounts and concentrations of phosphorus, sodium, potassium, calcium, and magnesium (71 rats). All *r*'s between mineral scores and learning scores were under .47, nearly all, less than .40. Nearly half the *r*'s suggested a negative relationship between particular minerals and the maze performance, but potassium displayed a consistently positive relationship. The significance of these findings is discussed.—D. K. Spelt (Mary Baldwin).

926. Beach, F. A. **Instinct and intelligence.** *Trans. N. Y. Acad. Sci.*, 1941, 4, 32-36.—It is suggested that "the efficiency with which an inherited behavior pattern is executed is, in part, a function of the intelligence of the individual;" that is, there is a positive correlation between individual differences in intelligence and individual differences in instinctive behavior. To test this hypothesis 30 female rats were given 30 learning trials on a simple maze and ranked in terms of total errors made. The same animals were also ranked in order of efficiency in several tests of maternal behavior. A positive correlation was found to exist between performance of the 2 types of behavior, which finding tended to confirm the postulation.—F. W. Finger (Brown).

927. Bibler, H. J. Order in thought. *New Scholast.*, 1942, 16, 74-75.—Abstract.

928. Brandt, H. F. Ocular patterns in visual learning. *Amer. J. Psychol.*, 1941, 54, 528-535.—“The purpose of this study is to investigate by means of ocular photography certain phases of the learning process.” 90 S's observed a card with 4 geometrical designs, with the intent to reproduce the designs later. Half the S's observed the card in one position, the other half with it rotated 180°. The card was exposed for 10 sec. The eye movements of the S's were photographed during the learning process. It was found that more time was devoted to observation of the top and left side of the card. Of all ocular excursions 395 were horizontal, 204 vertical, and 112 diagonal. Reproduction of the upper left-hand area was best. More difficult designs suffered more when shifted to a non-preferred position. With the more difficult designs, position was a greater determiner of achievement for S's of low than for those of high achievement.—D. E. Johannsen (Skidmore).

929. Burnham, R. W. Intersensory effects and their relation to memory-theory. *Amer. J. Psychol.*, 1941, 54, 473-489.—There has been a tendency to explain mnemonic losses in terms of some principle of interference or interaction. It is argued that before this can be assumed to be the only explanation it must be proved that all psychological processes are capable of interference. In the present experiment the problem was to determine the effects upon various sensory thresholds of the simultaneous excitation of heteromodal sensory processes. The effect of sound upon visual acuity, flicker-fusion limen, and the extent of retinal color fields, and the effects of different intensities of light upon the terminal limen for pitch were determined. The degree of attention was always controlled. In no case could cross-modal interaction be entirely responsible for the effects obtained. It is concluded that interaction alone is not adequate to explain all the phenomena of memory.—D. E. Johannsen (Skidmore).

930. Cushing, J. E., Jr. An experiment on olfactory conditioning in *Drosophila guttifera*. *Proc. nat. Acad. Sci., Wash.*, 1941, 27, 496-499.—One strain of a fungus-inhabiting fly, *Drosophila guttifera*, was reared in the larval stage on a laboratory medium, the other, on a medium containing commercial mushroom extract. As adults, the specimens were given an opportunity to lay eggs under test conditions which allowed choice of the 2 media. Flies reared as larvae on the laboratory medium laid eggs on that medium in a greater percentage of cases than flies reared as larvae on the fungus medium. The difference is statistically significant.—D. E. Smith (Alberta).

931. Dispensa, J., & Hornbeck, R. T. Can intelligence be improved by prenatal endocrine therapy? *J. Psychol.*, 1941, 12, 209-224.—One group of pregnant rats was given 8 daily injections

of thyroid and another group 7 daily injections of anterior pituitary extract, and the effects upon their litters were noted, the results being checked with non-injected control groups. The effects upon litter sizes, weight of offspring, care and nursing of young, etc. were observed. Controls and experimental animals of both groups were trained on a 12-unit multiple-T maze for a 3-week period. Accepting a working ratio of 1.73 as a criterion for significance (using the error scores of the last 10 runs for the analysis) the results indicate that prenatal endocrine treatments have an effect in favor of the treated animals.—F. A. Mote, Jr. (Connecticut).

932. English, H. B., & Edwards, A. L. Practice as cause of reminiscence. *Psychol. Rev.*, 1941, 48, 524-529.—“Before we can ascertain the effect of practice upon reminiscence, it is necessary to break down the data usually blurred by averaging. Study of the data thus broken down reveals the facts characteristic of the reminiscence situation. This leads to a re-definition of reminiscence as ‘the correction of an erroneous response or the supplying of a previously missing response without objective representation of the memory material or direct associative cues thereto.’ Reminiscence as thus conceived cannot be explained in terms of practice.”—A. G. Bills (Cincinnati).

933. Forster, M. Visual and visual-kinaesthetic learning in reading nonsense syllables. *J. educ. Psychol.*, 1941, 32, 453-458.—Words and their phonic symbols were exposed on ground glass screens to 80 adult subjects. Instructions were given to look at and say or to look at and trace the phonic symbols until they were learned. Test words using the same system of symbols were given to all subjects. Results were consistently in favor of the look-say method of learning. It is noted that tracing may be a distraction to adults whose habits of learning may be fairly well established.—J. W. Macmillan (Maryland).

934. Fryer, D. H. Articulation in automatic mental work. *Amer. J. Psychol.*, 1941, 54, 504-517.—After reviewing some of the literature dealing with the relationship between articulation and mental activities, the author points out that more experimentation is necessary in order to formulate any adequate theory. The present study reports 5 minor experiments dealing with different aspects of this problem. O's who were trained in introspection as well as larger groups of relatively untrained O's were used. They performed the author's Speed Addition Test under various conditions of articulation and/or non-articulation. It is concluded that forced articulation has little influence upon efficiency; a slight inhibition is likely. Intended inhibition of articulation is detrimental to efficiency. Normal automatic work is performed by students with little awareness of articulation. “To theorize from the experiments, one might believe that articulation to some degree at least is present in all mental activity. The concept of an articulative set is applicable. Articulation might be interpreted as

mental set which has degrees of conscious focus in inverse proportion to the automaticity of the task, and if the articulative set is disturbed by inhibition or exaggeration, performance will be inhibited according to the degree of the disturbance."—D. E. Johanssen (Skidmore).

935. Goldmeier, E. **Progressive changes in memory traces.** *Amer. J. Psychol.*, 1941, 54, 490-503.—The purpose of the present experiment was to determine the kind of changes which reproduced designs undergo with time. 162 female college students served as S's. Only 6 designs were used, and they were more complex than those used by Hanawalt (see XII: 722). Recall was demanded immediately and after 3 days, 2 weeks, and 6 weeks. Autonomous changes appeared clearly; they were directed toward outstanding (*prägnant*) values and toward consistent structure of the whole. "Outside material enters into relationship with the trace, not by merit of its hypothetical familiarity, but on the basis of structural kinship with the trace." It is concluded that Hanawalt's failure to find autonomous changes was due to the type of material used.—D. E. Johanssen (Skidmore).

936. Hebb, D. O. **Human intelligence after removal of cerebral tissue from the right frontal lobe.** *J. gen. Psychol.*, 1941, 25, 257-265.—2 cases are presented in whom surgical excision of scar tissue from the right frontal pole had been made; evidence is given showing the minimal extent of the lesions. The post-operative Stanford-Binet (Form L) IQ in one case was 139, and her Arthur Performance and McGill revision of the Army Beta scores were 53.90 and 94, respectively. The second case had a pre-operative IQ of 92 (Stanford-Binet), and his post-operative rating was 94. These data are "regarded as further evidence opposed to the localization of Binet- or performance-test ability in the frontal association areas."—C. N. Cofer (George Washington).

937. Heron, W. T. **The inheritance of brightness and dullness in maze learning ability in the rat.** *J. genet. Psychol.*, 1941, 59, 41-49.—This new report of Heron's work presents data on 12 additional generations through F_{16} (see IX: 3228). There is evidence that the 12-unit maze being used is not likely to discriminate the 2 strains of rats under present training conditions. Possibilities for the alteration of these conditions are discussed.—D. K. Spelt (Mary Baldwin).

938. Lehner, G. F. J. **A study of the extinction of unconditioned reflexes.** *J. exp. Psychol.*, 1941, 29, 435-456.—This study is designed to show that unconditioned reflexes exhibit extinction during successive presentations at 15 second intervals of a suitable supraliminal stimulus. Extinction was measured generally in terms of the number of stimulations required for extinction and in some cases in terms of a change in the magnitude of the response. Although extinction was not manifested for the patellar reflex of the cat, the biceps reflex in man, and the pupillary response in man, extinction curves

were secured for the tail reflex of the spinal rat, for the abdominal reflex in man, and for the startle response of the rat. The extinction curves obtained for these unconditioned reactions are all found to be similar in form, and they are similar in all important respects to the usual extinction curves for conditioned responses.—M. J. Zigler (Wellesley).

939. Livesay, T. M. **Intelligence of high-school seniors in Hawaii.** *J. educ. Psychol.*, 1941, 32, 377-380.—The 1935 edition of the American Council on Education Psychological Examination was given to 1264 males and 991 females in the territorial high schools of Hawaii. Results show that "measures of central tendency are slightly higher for the males but the differences are not significant. . . . There are definitely significant differences on subtest scores—the males showing superiority on the Completion, Arithmetic, and Analogies tests, and the females on the Artificial Language and Opposites tests." Language difficulty is given as a possible reason for the differences between obtained scores and test norms.—J. W. Macmillan (Maryland).

940. Mann, C. W., & Jewell, W. O., Jr. **Configural aspects of human learning on the electrical maze.** *Amer. J. Psychol.*, 1941, 54, 536-545.—The purpose of the present study was to investigate some of the configurational aspects of maze learning in human S's. A bolt-head maze (reliability $r = .84$ for time, .90 for errors) was used with 43 college students. They had 3 trials per day for 5 days. The experimental group (26 S's) drew a map of the correct pathway after each day's practice. No reliable difference was found between the experimental and the control groups. The beginning and end of the maze were learned first. Analysis of the maps indicated that small patterns (at least 3 correct bolts in sequence) were built up first, to be replaced by patterns of larger wholes. "It is suggested that the larger wholes consisted not of patterns made by the addition of smaller wholes, but by patterns formed of new wholes developed out of the total ground by the process of learning."—D. E. Johanssen (Skidmore).

941. Mason, M. **Changes in the galvanic skin response accompanying reports of changes in meaning during oral repetition.** *J. gen. Psychol.*, 1941, 25, 353-401.—10 subjects were employed in 3 experiments in which the types of change in meaning were studied in relation to galvanometric modifications. In the first experiment (certainty of meaning) the subjects learned sets of nonsense syllables, and they were asked to state whether they were certain of the correctness of their performances at various stages in the learning. In the second experiment (discovery of meaning) series of scrambled meaningful words were presented, and the subject was asked if he saw their meaning. In the third experiment (loss of meaning) the subject repeated a word over and over and signalled when it had lost its meaning. The greatest galvanometric change in experiment 1 "occurred during answers denoting the most uncertainty; the least change

accompanied answers denoting the most certainty." In the second experiment more galvanometric change "accompanied answers denoting Discovery-of-Meaning than accompanied those denoting lack of such discovery." The third experiment showed that "more change occurred in intervals in which signals of loss of meaning had been given, than occurred in those without such signals."—C. N. Cofer (George Washington).

942. Menzies, R. Further studies of conditioned vasomotor responses in human subjects. *J. exp. Psychol.*, 1941, 29, 457-482.—Vasoconstriction, produced by stimulating one hand in cold water, was conditioned to a light or to a light accompanied by vocal activity. The extent of conditioning was measured in terms of relative frequency of conditioned responses. The compound light-vocal substitute stimulus was successful in certain subjects who received 40 training combinations but unsuccessful in all subjects who were given 20 training combinations. Control experiments revealed that the dual stimulation was the significant feature in the process of conditioning. Conditioning experiments including 40 training combinations with the simple light stimulus, i.e. without vocal activity, were unsuccessful, although in previously reported work these had been reported successful.—M. J. Zigler (Wellesley).

943. Morgan, J. J. B., & Lannert, V. Z. The element of habit in persistence. *J. educ. Psychol.*, 1941, 32, 465-470.—2 groups of 12 boys and 13 girls equated for age and intelligence were subjects. After the experimental group had been given training in a persistence maze, both groups were given a maze problem for which there was no solution. Performance was rated on a 9-point scale. The experimental group tended to work longer and to do better work than the control group, when confronted with a maze for which there was no solution.—J. W. Macmillan (Maryland).

944. Morton, N. W. The reciprocity of visual clearness and the span of apprehension. *Amer. J. Psychol.*, 1941, 54, 553-558.—The present experiment undertook to demonstrate the linear form of the reciprocal relation between clearness and span of apprehension. The materials were cards, 6 x 3 in., used in a tachistoscope having an exposure time of .25 sec. 8 letters (20-point type) were pasted at equi-distant points on the circumference of a circle having a diameter of 2 in. In Experiment 1 some of the cards had one of the 8 letters in a larger type. These critical letters appeared in any of the stimulating positions used. 20 college students served as S's. r 's between the number of letters reported and the size of the critical letter varied from +.10 to -.37, with an arithmetic mean of -.21. In Experiment 2 the critical factors were small pictures, numbers, figures, or colored letters; 4 different sizes were used, and each time the critical factor appeared in one of the 3 top positions on the circle of stimulation points. 40 S's were used. r 's ranged between 0 and -.61, with a mean of -.35. The reasons for

these small r 's are considered.—D. E. Johanssen (Skidmore).

945. Pavlova, A. [Conditioned reflexes in senility.] *Priroda, Leningr.*, 1940, 29, 65-71.

946. Rey, A. La rétention de trois habitudes différentes à la suite de lésions du cortex cérébral chez le rat. (Retention of 3 different habits following lesions of the cerebral cortex in the rat.) *J. Psychol. norm. path.*, 1939, 36, 424-450.—Rats were trained in simple-choice runway problems depending on visual, auditory, or olfactory mediation. Retention was tested after removal of various portions of cortex. The results are interpreted in terms of the principles of mass action and specialization (functional localization). Small lesions (15-23%), regardless of locus, produce no decrease in retention; the effect of the specialization factor is compensated for by the mass action of the remaining tissue. Lesions covering 22-28% of cortical area lead to retention losses primarily when the destroyed tissue is located in the projection area involved in the habit: mass action can no longer compensate for the effect of specialization. The losses following still more wide-spread injuries (28-38%) parallel the amount of destruction, although the effect is most striking when the corresponding projection area is disturbed: the factor of mass action again predominates. Exceptions to this law of disintegration of cortical function are accounted for on the basis of sub-cortical mechanisms, as well as lack of exact topographical knowledge of functional areas.—F. W. Finger (Brown).

947. Roosen, R. Zum Gedächtnisproblem. (The problem of memory.) *Schweiz. Arch. Neurol. Psychiat.*, 1941, 46, 33-40.—Roosen's thesis is: There is no basic distinction between living and non-living matter. Colloidal properties are possible to all matter. Not only living matter, but atoms, protons, and electrons have biological mnemonic functions (quicker repetition of a once-experienced reaction, reciprocal attraction, economy of force, creative purposeful cooperation). Engram activity is a reciprocal influence on the vibration of particles, independent of the mass of the bearer, indestructible, extending infinitely into space. The distinction between the sensory world and the world of physics is fundamental. Formation of engrams belongs exclusively to the latter; their ekphoria, to the former. Memory based on protoplasm belongs to both worlds; that, the substratum of which is non-living colloid, sometimes appears in the sensory world as rudimentary traces; that which has a non-colloidal base is confined to the world of physics. These concepts give a new idea of death. When protoplasm disintegrates, the collections of engrams constituting personality are annihilated. This is death in the sensory world; but memory traces belonging to the world of physics persist to infinity as social memory.—M. E. Morse (Baltimore, Md.).

948. Tuttle, H. S. That vague word, conditioning. *J. educ. Psychol.*, 1941, 32, 431-437.—"The word 'conditioning' refers only to a process, not to a

process-and-its-object. Specifically it does not necessarily mean conditioning reflexes, it may refer with equal accuracy to conditioning other outcomes. . . . Conduct cannot be wholly accounted for by intellectual processes. There is a dynamic element in all behavior . . . that . . . has long been referred to as motive. . . . Conditioning is the learning activity which produces . . . motives. There should be a word [to replace 'conditioning'] . . . sharply defined as meaning 'direct learning of attitudes or dynamic tendencies by association of feelings'." Conditioning may apply to various types of learning. Changing of skills, beliefs, judgments, interests, tastes, and attitudes are all brought about through conditioning. "Conditioning is a process of learning produced solely by associated feelings, strengthening an attitude or interest if pleasant, weakening it if unpleasant. It is thus a process of direct learning differing from intellectual learning."—J. W. Macmillan (Maryland).

949. Van Rensburg, J. A. J. The learning ability of the South African native compared with that of the European. *S. Afr. Coun. educ. soc. Res. Ser.*, 1938, No. 5. Pp. 43.—398 natives (of the Xosa tribe) and 181 European pupils, about 14-15 years of age, were compared. Efforts were made to control factors shown by previous investigators to vitiate comparisons. 4 learning tasks were used: the double-handle test of Moede, a mirror-drawing test, a sorting test, and a maze test. In the maze test, which was very simple and after the initial learning became a speed test, and on the sorting test the natives "learned" about as well as the Europeans, though their initial scores were inferior. On the double-handle and mirror-drawing tests there was initial native inferiority and no tendency for the scores to approach those of the Europeans. "Results indicate, though they do not prove, that the difference in ability in tasks like those contained in the double-handle and mirror-drawing tests, representing thinking and difficulties to be overcome, is partly innate." On tasks of an extremely simple nature, the South African native does have the learning ability to compete on equal terms with the average European.—E. L. Horowitz (City College, New York).

950. Young, C. W., & Supa, M. Mnemic inhibition as a factor in the limitation of the memory span. *Amer. J. Psychol.*, 1941, 54, 546-552.—The present experiment was undertaken to determine whether internal inhibition could be demonstrated for immediate memory span. The memory span for series in which all elements were alike was compared with that in which the last 3 elements were different; digits and words were the stimuli. 34 college men served as S's. The series were presented orally at the rate of 1 per .75 sec. The mean span for digits alone was 7.19, for digits followed by words, 8.02, and the critical ratio of this difference was 5.38. Words alone gave a span of 6.40, words followed by digits, 6.79, and the CR of this difference was 3.37. The hypothesis that memory span is

limited by mnemic inhibition is thus substantiated.—D. E. Johannsen (Skidmore).

[See also abstracts 844, 864, 868, 901, 907, 969, 1004, 1021, 1024, 1027, 1055, 1152, 1174, 1186, 1204, 1222, 1262.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

951. Anderson, E. E. Sex differences in timidity in normal and gonadectomized rats. *J. genet. Psychol.*, 1941, 59, 139-153.—42 normal male and 40 normal female rats were compared with 42 castrated males and 43 ovariectomized females in 4 tests of timidity: (1) open field defecation, (2) water wading defecation, (3) emergence from living cage, and (4) emergence from U-shaped stovepipe (gonadectomized animals only). Females uniformly made lower (timidity) scores than males, and this difference was uninfluenced by prepubertal gonadectomy. Several possible interpretations of the data are discussed, and it is concluded that a true sex difference in timidity is represented.—D. K. Spelt (Mary Baldwin).

952. Barach, A. L., Eckman, M., & Malomut, N. Modification of resistance to anoxia with special reference to high altitude flying. *Amer. J. med. Sci.*, 1941, 202, 336-341.—Emotional control and judgment are impaired by relatively mild degrees of anoxia, and there may be a connection between "pilot error" and continuous anoxia at 12,000 ft. Military flying is conducted at altitudes (40,000 ft.) so high that anoxia occurs even with inhalation of 100% oxygen. This paper deals with: aggravation of anoxia by CO poisoning from inhaling tobacco smoke; and increased resistance to anoxia after thyroidectomy. Carbon monoxide poisoning may impair resistance to anoxia when a pilot is traveling without oxygen at 10,000-12,000 ft., and with 100% oxygen at 34,000-40,000 ft. In 18 inhaling smokers the average CO saturation of arterial blood (under room conditions) was 5.7% after smoking 20 cigarettes between 9 A.M. and 4 P.M.; in 9 subjects it was 5-10%. Thyroidectomized rats show remarkable resistance to continuous exposure to low oxygen concentrations. Probably pilots with a low basal metabolism would withstand very high altitudes better than pilots with a low rate, and possibly methods may be found to reduce basal metabolism temporarily.—M. E. Morse (Baltimore, Md.).

953. Barnes, T. C. Rhythms of activity in ant colonies. *J. gen. Psychol.*, 1941, 25, 249-255.—"Small groups of worker ants in artificial nests exhibit rhythmic activity showing a more uniform level than the activity of individual animals in solitary confinement. Very active individuals or 'catalyst' ants raise the activity level of the colony as a whole. The activity is increased by light and depressed by heavy water. Chloretone produces temporary stimulation followed by convulsions and paralysis."—C. N. Cofer (George Washington).

954. Copp, H. W. Swimming as a motor skill. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1941. Pp. 167. \$2.09.—See *Microfilm Abstracts*, 1941, 3, No. 2, 1-3.

955. Danilov, A. A. [Physiology of the emotions from the view-point of recent achievements in investigations of the glands of internal secretion.] *Priroda, Leningr.*, 1940, 29, 61-69.

956. Duffy, E. An explanation of "emotional" phenomena without the use of the concept "emotion." *J. gen. Psychol.*, 1941, 25, 283-293.—The author attempts to show that emotional experiences, "which appear to be unique, are in fact merely manifestations in extreme degree of phenomena which are of very general occurrence, and which follow the same principles of action throughout the continua of their occurrence, rather than different principles of action during the condition called 'emotion'." Emotion is an "an individual's response to situations which promise well or ill for the attainment of his goals." Energy level changes occur, correlating with high or low motivation; but all behavior is motivated. Disorganization is characteristic of emotion; this is true, however, of any behavior occurring at a high or low energy level. The subjective aspects of emotion arise (1) from awareness of bodily changes and (2) from awareness of the stimulating situation and preparation for response to it. These factors are also present in non-emotional conscious states. All aspects of emotion are deviations of degree, rather than kind of response.—C. N. Cofer (George Washington).

957. DuShane, G. P., & Hutchinson, C. The effect of temperature on the development of form and behavior in amphibian embryos. *J. exp. Zool.*, 1941, 87, 245-258.—The behavioral and morphological development of *Amblystoma punctatum* embryos was studied under two conditions of constant temperature: 11° and 20.5° C. Significant differences in behavior were observed in several morphological stages as a function of the environmental temperature. "The development of behavior is somewhat more greatly inhibited by low temperature than is the development of form."—J. L. Kennedy (Tufts).

958. Eccles, J. C., & Kuffler, S. W. The end-plate potential during and after the muscle spike potential. *J. Neurophysiol.*, 1941, 4, 486-506.—D. B. Lindsley (Brown).

959. Fenn, W. O. [Ed.] Biological symposia. Vol. III. Muscle. Lancaster, Pa.: Jaques Cattell Press, 1941. Pp. 370. \$3.50.—This volume is an expansion of a symposium on muscle held at the annual meeting of the American Physiological Society in 1940. Various aspects of muscle physiology are discussed, such as muscle function in single muscle fibers, muscle excitability, muscle action potentials, conduction in muscles, muscle end plate phenomena, heart muscle, diseases of muscle, and theories of electrolyte equilibrium.—C. Pfaffmann (Brown).

960. Frenkel, O. M. [Changes in excitability of the vestibular apparatus induced by repeated stimulation.] *Bull. Biol. Méd. exp. URSS.*, 1940, 9, 69-72.—[Abstracted review; original not seen.] Young subjects were stimulated by 10 turns in the Barany chair. When the tests were repeated daily, the duration of post-rotational nystagmus was increased in 25, decreased in 26, and unchanged in 7 cases, while the duration of the illusion of turning was diminished in 33, lengthened in 5, and unchanged in 15 cases. Changes in skin temperature were slight and significant only with very frequently repeated stimulations.—C. Pfaffmann (Brown).

961. Hall, C. S. Temperament: a survey of animal studies. *Psychol. Bull.*, 1941, 38, 909-943.—This survey of the literature is confined to studies on rats and mice. It is concluded that timidity or fearfulness can be validly and reliably measured. The timid rat is more active, less proficient in learning, less sexual, less aggressive, more variable, and less subject to epileptic attacks than the fearless rat. Fearless and timid strains have been established by selected breeding. The timid rats have heavier endocrines than the fearless. Although excellent measures of individual differences in aggressiveness and activity are available, relatively few studies have been oriented to the present purpose. More carefully controlled studies are needed in order to establish the genetic basis of wildness and savageness. The review includes a discussion of temperament as the "raw stuff" of individuality and suggests other temperamental traits which might be approached through animal experiments, as for example variability, reaction strength, docility, friendliness, and spontaneity. Bibliography of 58 titles.—F. McKinney (Missouri).

962. Hellebrandt, F. A., & Karpovich, P. V. Fitness, fatigue and recuperation. *War Med.*, Chicago, 1941, 1, 745-768.—With special reference to military applications, the authors review the experimental approach to the problem of fitness (training, fortifying physiological mechanisms, agencies which directly affect muscle metabolism, dulling sensitivity to fatigue, psychological factors). Agents which improve the physiological condition are the safest; those which push the person beyond his normal limits are potentially dangerous, but justifiable in the life-or-death conditions of war. The most enduring gain can probably be attained through training, associated with an aroused desire for fitness. In the average man, psychological drives are probably the most potent stimulants. When the incentives are internal and necessary hygienic precautions taken, there seems to be no difference in the health of persons who habitually work to exhaustion and those who allow a wide margin of safety.—M. E. Morse (Baltimore, Md.).

963. Hulin, W. S., & Moore, A. R. Coordination in starfish. (Film.) Bethlehem, Pa.: Psychological Cinema Register, 1940. 360 ft. \$18.00.—Pacific coast starfish were photographed with the camera adjusted to produce artificial accelerated motion

during projection. The demonstration is intended to show the facts of starfish behavior without elaborated theories. Normal animals (with 5 rays) were placed on their backs to show the pattern of the righting responses in turning over to normal locomotor positions. Then the nerve ring was sectioned and the righting behavior again observed. Certain "sports" in the form of starfish with 6 or more rays were photographed to show normal righting responses and behavior after sectioning the nerve ring. Animated diagrams illustrate the positions of nerve sections. The pictures were taken through sea water, in the normal environment.—A. Ford (Lehigh).

964. Jellinek, A. Influence of passive rotation on the intonation of the voice. *J. Psychol.*, 1941, 12, 185-190.—Several subjects, including trained singers, were rotated at the rate of 1 revolution per second for 10-20 complete revolutions in order to determine the effect of such rotation upon the ability to reproduce given single notes, tunes, etc. No disorders were found while the rotation was in progress, but in a short post-rotational interval several disorders of intonation were observed such as: inability to make a sound for a short time, tremor of the voice, incorrect pitch, etc. Tunes, continuous tones, scales, and other musical forms were correctly completed during this post-rotational interval provided they were begun before the cessation of rotation. Adaptation to the rotation was found. It is concluded that the effect of vestibular stimulation on intonation is secondary to its effect on such factors as attitudes, emotions, etc.—F. A. Mote, Jr. (Connecticut).

965. Juarros, C. El nivel motorico. (Stages of motor activity.) Madrid: J. Morata, 1941.—[Abstracted review; original not seen.] Motor activity is manifested in regular developmental stages. Basic factors are the embryological antecedents and the structural and functional properties of motile organs; for clinical purposes the hand is important. Other topics treated include training habits, neurotic disturbances, and the problem of children of subnormal development and growth.—H. D. Spoerl (American International College).

966. Kennard, M. A., Spencer, S., & Fountain, G., Jr. Hyperactivity in monkeys following lesions of the frontal lobes. *J. Neurophysiol.*, 1941, 4, 512-524.—Unilateral ablation did not produce marked hyperactivity in monkeys and chimpanzees nor did partial ablations involving areas 8, 9, or 10-12 of Brodmann. The greatest hyperactivity occurred with all areas (8-12) removed bilaterally. Destruction of rostral portions of areas 6 or 8 produced hypomotility. In monkeys the hyperactivity consisted of continual, restless, pacing back and forth; in chimpanzees restless and distractible behavior similar to that observed in man after bilateral frontal lobectomy was seen. The hyperactivity is not related to increased hunger, increased metabolism, or general increase in autonomic activity; neither is it similar to hyperactivity induced in

intact monkeys by thyroid extract injection. Absence of sound has no effect on the restless behavior, but absence of light stops it as does also enucleation of eyes or occipital lobectomy. In this connection attention is called to the fact that memory loss in delayed response experiments with monkeys is less also under reduced illumination. The phenomenon of hyperactivity due to ablation is interpreted as a "release of function," and its possible relationship to restless behavior in problem children and to man without frontal association areas is stressed.—D. B. Lindsley (Brown).

967. Krasnushkin, E. K. [Certain correlations between endocrine and mental disturbances.] *Probl. endokrin., Mosk.*, 1940, 5, No. 3, 72-84.

968. Liberson, M., & Liberson, W. Recherches biométriques sur la fréquence cardiaque et l'indice systolique dans les états affectifs. (Biometrical studies of the heart rate and the systolic index in affective states.) *Contr. Inst. Biol. Univ. Montréal*, 1941, No. 9, 21-43.—Statistical analysis of an array of physiological tests seems to indicate the possibility that pulse changes and systolic index may be useful in differentiating the "good" from the "poor" individual in aptitude selection.—C. H. Graham (Brown).

969. Mills, C. A. Mental and physical development as influenced by season of conception. *Hum. Biol.*, 1941, 13, 378-389.—Data were obtained from 45,000 college freshmen. "It seems clear that season of conception plays an important part in an individual's later development. Winter conception (January, February, March) provides a significant advantage along lines of mental achievement. The higher metabolic level of protoplasmic vigor during winter cold seems to be transmitted through the germ plasm, and to exert a lasting effect upon the future course of offspring. Earlier onset of menses occur, as well as a much greater likelihood of college matriculation. However, for some as yet unexplained reason, superior body size is favored by summer, rather than winter, conception."—N. R. Barlett (Brown).

970. Piddington, L. S. A factorial study of types of fear. *Brit. J. educ. Psychol.*, 1941, 11, 227.—Abstract.

971. Popov, G. W. [Chronaxie during exercise as related to the dynamics of nervous processes.] *Fiziol. Zh. S.S.S.R.*, 1939, 27, No. 4, 428-436.—(*Biol. Abstr.* XV: 23592).

972. Ray, C. N. Extra strong heliotropic effect of neon lights. *Science*, 1941, 94, 585-586.—In Texas in late summer flying bugs of several species are found swarming about electric lights. The author has observed that the insects are much more attracted to neon lights than to ordinary lights, and he suggests that the greater heliotropic effect of the neon lights may be due to the fact that neon radiation possesses components to which the organisms are particularly responsive.—F. A. Mote, Jr. (Connecticut).

973. Schlosberg, H. A scale for the judgment of facial expressions. *J. exp. Psychol.*, 1941, 29, 497-510.—45 students were required to sort 216 Frois-Wittmann pictures into a rack containing 6 main bins—(1) love, happiness, mirth; (2) surprise; (3) fear, suffering; (4) anger, determination; (5) disgust; (6) contempt—and an additional discard bin. Analysis of the distribution of pictures in the 6 main bins discloses a scale of continuous rather than discrete categories. The 6 steps are found to be reasonably equal, and the spread of judgments across the gap between steps 6 and 1 indicates that the scale is a recurrent or circular series.—*M. J. Zigler (Wellesley)*.

974. Seyffarth, H. The behavior of motor units in healthy and paretic muscles in man. *Acta psychiatrik., Kbh.*, 1941, 16, 79-109.—The study is an electromyographic investigation of the behavior of motor units during isometric contractions and their synergy during combined movements. The author makes the point that it may possibly be a characteristic feature of all coordinated movements that where an attempt is made to combine 2 movements, e.g. to add pronation to flexion, the result is not merely summation but a new movement in a new synergy which combines the effects of both. Further, the proportion of the muscle taking part in the combined isometric flexion rotation often seems to depend on the relative force of the 2 movements. Such a close analysis of the functioning of the individual muscles during combined movements seems to be of importance when we are concerned with exercising the paretic muscles.—*R. K. Meister (Mooseheart Laboratory for Child Research)*.

975. Simonson, E., & Enzer, N. The effect of Amphetamine (benzedrine) sulfate on the state of motor centers. *J. exp. Psychol.*, 1941, 29, 517-523.—Subjects were required to press the button on a Cenco impulse counter as fast as possible for a minute (1) in the morning, and (2) in the evening after Amphetamine had been given just before lunch. All mean values for evening tests were higher on days when Amphetamine was taken. This is shown both in the absolute values for the evening trials and in the differences between morning and evening values. These results are compared with other findings which show that fusion frequency is higher on days when Amphetamine is taken.—*M. J. Zigler (Wellesley)*.

976. Thompson, J. Development of facial expression of emotion in blind and seeing children. *Arch. Psychol.*, N. Y., 1941, No. 264. Pp. 47.—The facial expressions of laughing, smiling, crying, anger, fear, sulkiness, etc. were studied by observational and photographic methods in a group of 26 blind and 29 seeing children, ranging from 7 weeks to 13 years of age. The main findings of the study indicate that: (1) organized neuromuscular patterns of response corresponding to each of these facial expressions do appear without opportunity for learning or social mimicry; (2) maturation, as revealed by changes in expression of blind children,

leads to a decrease in facial activity in smiling and laughing beyond 2 to 3 years of age; (3) social mimicry or learning, as revealed by changes in expressions of seeing children, is apparently responsible for the maintenance of a constant amount of facial activity in smiling and laughing with increasing age, instead of decrease as in blind, and leads to a tendency for the emotional expressions to become stylized; (4) there are certain differences in the expressions of the two groups of children, blind and seeing, as revealed by the greater success in judging expressions when the judge is more familiar with one or the other kind of child.—*K. W. Spence (Iowa)*.

977. Timofieev, N. V., & Chusov, M. P. [Effect of training on post-nystagmus and excitability of the vestibular apparatus.] *Vestn. Otorinolaryng.*, 1940, No. 9, 12-17.

978. Xoomsai, T. Measurement of emotional reactions. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1941. Pp. 142. \$1.78.—See *Microfilm Abstracts*, 1941, 3, No. 2, 85-87.

979. Youngstrom, K. A. Acetylcholine esterase concentration during the development of the human fetus. *J. Neurophysiol.*, 1941, 4, 473-477.—A correlation between the developing behavior of fetuses, ranging in age from 56 to 189 menstrual days, and the concentration of choline esterase in various parts of the nervous system has been made. Choline esterase is an enzyme which has to do with the reduction of acetylcholine, which in turn is concerned with transmission and excitation phenomena in the nervous system. The results indicate that the rapid development of behavior shortly after 56 menstrual days of age is accompanied by a rapid increase in the choline esterase concentration in the spinal cord, medulla, and midbrain. This increase continues to about 121 menstrual days when the fetus has almost all specific reflexes of the adult except respiration. After 121 days menstrual age a sharp rise in the choline esterase concentration occurs in the basal ganglia and cerebrum. The sequence of increase of the enzyme concentration (spinal cord, medulla, midbrain, diencephalon, basal ganglia, and cerebral hemispheres) correlates well with the order of morphological development in the central nervous system and also is in agreement with the fetal stages of development of behavior as outlined by Minkowski, although the functional development appears to begin earlier in the c.n.s. A greater concentration of the enzyme is found in fetal than in adult tissues.—*D. B. Lindsley (Brown)*.

980. Zubin, J., & Taback, M. A note on Sheldon's method for estimating dysplasia. *Hum. Biol.*, 1941, 13, 405-410.—Sheldon's method is analyzed and simplified. A second method for estimating dysplasia is also suggested. "By using the inter-region variance as an index . . . we are able to answer two important questions concerning such a measure. The first deals with its reliability which is determined by comparing it with the intraregion variance. The second question deals with the matter

of individual differences in dysplasia. Since variances are directly comparable, the significance of their difference being a direct function of their ratio, individuals as well as groups can be compared in respect to their dysplasia measures."—*N. R. Bartlett* (Brown).

[See also abstracts 847, 850, 873, 884, 885, 903, 926, 928, 931, 934, 941, 1001, 1030, 1036, 1042, 1048, 1089, 1143, 1274.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

981. Bañuelos, M. *Patología y clínica del sueño y estados afines*. (Pathology and clinical study of the dream and related states.) Barcelona: Editorial Científico-Médica, 1940.—[Abstracted review; original not seen.] The medical, biological, and physiological aspects of dreaming are treated, as well as the psychological; the psychological discussion is eclectic. Narcolepsy, catalepsy, and lethargy are included in the work.—*H. D. Spoerl* (American International College).

982. Baynes, H. G. Jung's conception of the structure of personality in relation to psychical research. *Proc. Soc. psych. Res., Lond.*, 1941, 46, 377-388.—The writer discusses certain psychical phenomena, mediumship in particular, in the light of Jung's basic theory. The possibility of investigating mediumship from the point of view of Jung's conception of personality is suggested.—*J. G. Pratt* (Duke).

983. Bernfeld, S. The facts of observation in psychoanalysis. *J. Psychol.*, 1941, 12, 289-305.—Some of the resistance to accepting psychoanalysis as a scientific discipline arises from the type of data with which it deals. This data is controlled conversation, and it is shown how the psychoanalyst participates in the responses of the patient, removes obstacles to communication, uncovers sources of resistance, and verifies the confessions of the patient. Just as in the other sciences the facts of observation in psychoanalysis can be described in a manner acceptable to scientists. Suggestions for improving the method of conversation are offered.—*F. A. Mote, Jr.* (Connecticut).

984. Castellano, F. *El psicoanálisis de Freud*. (Freud's psychoanalysis.) Buenos Aires: Difusión, 1941. Pp. 89.—[Abstracted review; original not seen.] This is a brief synthesis of the history and doctrines of Freudian psychoanalysis. The critical discussion is concerned chiefly with the dynamic unconscious, sexuality, pedagogy, and religion in relation to psychoanalytical method.—*H. D. Spoerl* (American International College).

985. Greenacre, P. The predisposition to anxiety. Part II. *Psychoanal. Quart.*, 1941, 10, 610-638.—The main general considerations of treatment of severe neurotic or borderline states depend upon the characteristics of development as described in the first paper (see XV: 2179). Treatment may be discussed from 4 aspects: the handling of the overload of anxiety to permit an optimum state for the prog-

ress of analysis; the education of the narcissism to better ego proportion; the management of the residue of unanalyzable anxiety which is present throughout and continues to operate after analysis; and the analysis of the "essential" neurosis. Anxiety is divided into: basic, blind, or amorphous anxiety; anxiety arising in response to fresh dangers and frustrations; and secondary anxiety arising from inadequacies of neurotic defenses. These considerations are then discussed in detail, and specific analytic case material from 4 patients is cited to illustrate the discussion.—*M. H. Erickson* (Eloise Hospital).

986. Livingood, F. G. Hypnosis as an aid to adjustment. *J. Psychol.*, 1941, 12, 203-207.—Two cases are described. One involved stuttering and the other nervous tension, particularly while walking; the latter subject suffered from hemiplegia and hemianopsia resulting from an operation. Both showed emotional tension, fear, lack of confidence, and feelings of inability to meet situations. Hypnosis made it easier to give suggestions which resulted in improvement.—*F. A. Mote, Jr.* (Connecticut).

987. Reuter, W. L. An objective study in extra-sensory perception. Philadelphia: Diss., Temple University, 1941. Pp. 126.—After a detailed review of literature bearing on psychic and telepathic phenomena, this book reports the following experiments in ESP: an experiment using ESP cards with high school students as subjects; a similar experiment with college students as subjects; an experiment using a mechanical symbol selector; an experiment using pictures of common objects instead of ESP symbols. Average successes for the various large groups of subjects were no better than chance expectation. Subjects making extreme scores made decidedly less extreme scores on retest. It is concluded that chance alone was the deciding factor throughout these experiments.—*D. W. Chapman* (Bennington).

[See also abstracts 1180, 1192.]

FUNCTIONAL DISORDERS

988. Aita, J. A. Neurologic and psychiatric examinations during military mobilization. *War Med., Chicago*, 1941, 1, 769-780.—Continuing his previous studies (see XV: 4650) Aita reports the results on 9,652 draftees given his minimal neuropsychiatric examination (see XV: 4696) at Fort Snelling, Minn., between Feb. 13 and Apr. 15, 1941. 2.5% were disqualified for neuropsychiatric reasons, the chief being, in order of frequency: mental defect; neurologic conditions (epilepsy, post-traumatic conditions, etc.); psychoneuroses; psychopathic personality; schizoid or paranoid personality; mood disorders; and alcoholism. Neuropsychiatric notations could be made on 20% of the men accepted. This borderline group should be delimited and rated for further study. It will be 5-10 years before the accuracy of the prognosis can be determined, but meanwhile the Medical Department should begin to plan for improvements in the diagnosis, prevention, and treatment of

neuropsychiatric disorders. Since both the man and his employer are privileged to know the reason for rejection, unnecessary publicity about psychiatric examinations should be avoided, particularly popular sensational accounts in the press.—*M. E. Morse* (Baltimore, Md.).

989. Amdur, M. K., & White, A. W. A classification of psychoses. *Med. Rec.*, N. Y., 1941, 154, 421-423.—The authors present a brief statement of the psychiatric classification system proposed by A. K. Lentz of Leningrad in which mental conditions are all grouped in either of the two categories of "destructive psychoses (irreversible)" and "non-destructive psychoses (reversible)."—*M. H. Erickson* (Eloise Hospital).

990. Anastasi, A., & Foley, J. P., Jr. A survey of the literature on artistic behavior in the abnormal: II. Approaches and interrelationships. *Ann. N. Y. Acad. Sci.*, 1941, 42, 1-112.—3 approaches to the phenomena of insane art are differentiated. In the artistic approach the abnormal production is viewed as an object of aesthetic regard. In the psychiatric approach the art product is considered from the standpoint of its diagnostic and of its therapeutic value. The psychological approach is concerned with the perceptual, imaginative, or other intellectual as well as emotional functions leading to the production of the art. Viewpoints noting the resemblances between artistic productions of the abnormal, on the one hand, and primitive, child, "populistic," and modern and fantastic art as well as the art of particular cultural groups, on the other hand, are summarized. The relationships between personality traits and artistic ability, as represented in the literature, are reviewed. (See also XV: 3387, 5114, 5115).—*D. G. Ryans* (Cooperative Test Service).

991. Barrett, J. E. Psychiatric facilities in Virginia and some neighboring states. *Amer. J. Psychiat.*, 1941, 97, 1219-1237.—A historical review and description of the facilities for the care of mental patients in Virginia, North Carolina, South Carolina, and Georgia.—*R. Goldman* (Boston Psychopathic Hospital).

992. Bennett, G. Structural factors related to the substitute value of activities in normal and schizophrenic persons: I. A technique for the investigation of central areas of the personality. *Character & Pers.*, 1941, 10, 42-50.—The method described is essentially as follows: The subject is presented an ambiguous, neutrally-toned picture and asked to write a story about the most unhappy event of the pictured person's childhood (analogous to the Thematic Apperception Test). While engrossed in the task he is interrupted and directed to construct with toys the most interesting and exciting situation he can think of. He is observed through a one-way mirror during both activities and for a period of 10 minutes after completing the second task. The results, which are to be presented in a subsequent article, are calculated to reveal central aspects of personality.—*M. O. Wilson* (Oklahoma).

993. Berkwitz, N. J. Faradic shock in treatment of functional mental disorders. *Arch. Neurol. Psychiat.*, Chicago, 1940, 44, 760-775.—The author reports treatment, by faradic shock, of 73 patients with various mental disorders, "with results paralleling those reported with other forms of shock therapy. More striking results were obtained in conditions in which the personality was acutely involved (as in paranoid and catatonic types of schizophrenia) than in conditions in which it was partially involved (as in psychoneuroses) over a long period."—*C. K. Trueblood* (Cambridge, Mass.).

994. Bersot, H. Le développement de l'assistance aux anormaux en Suisse. (The development of the care of abnormals in Switzerland.) *Praxis*, 1941, 30, 452.—Abstract.

995. Bumke, O. Psychopathische Anlagen, Zustände, Einstellungen und Entwicklungen. (Psychopathic predispositions, conditions, attitudes, and developments.) *Handb. inner. Med.*, 1939, 5, 1562-1677.—[Abstracted review; original not seen.] Bumke gives a comprehensive review of the problem of psychopathy and describes a number of types: the schizoid fanatic, the emotionally cold, anti-social, dysthymic, cyclothymic, syntonetic, suspicious, soft egoistic, autistic, paranoid, etc. The physical types and metabolism are discussed in the light of Jahn's and Greving's findings. There are sections on nervousness, obsessions, hypochondriasis, and psychogenic reactions. Bumke's viewpoint is opposed to psychoanalysis, Individual Psychology, and Jung's psychic analysis.—*M. E. Morse* (Baltimore, Md.).

996. Caldwell, J. M. The constitutional psychopathic state (psychopathic personality): I. Studies of soldiers in the U. S. Army. *J. crim. Psychopath.*, 1941, 3, 171-179.—31 case histories showing psychopathic personalities of long duration were chosen from 191 Army admissions to Corozal Hospital, Canal Zone, during 1937-1939. These cases show that the constitutional psychopathic state is a syndrome consisting of a definite type of basic personality characterized by social and sexual delinquency, drug-addiction, ego-centrism, and certain intellectual defects such as lack of a sense of responsibility, lack of judgment, inconsistent worry, and rationalization. The most easily detected trait of the constitutional psychopath is his nomadism, desire for change, and inability to withstand tedium. Drug-addiction (mainly alcoholism) was found in 22 of the cases, and 20 cases developed a clear-cut neurosis or psychosis. Neuropathic family histories or unusual family associations were present in 27 of the 31 cases.—*A. Chapanis* (Yale).

997. Dellivenneri, A. P. Como evitar as moléstias nervosi i mentais. (Prevention of nervous and mental diseases.) *Rev. Neurol. Psiquiat. S. Paulo*, 1941, 7, 197-210.—In an address before the S. Paulo Bankers Association, Dellivenneri sketches the causes of nervous and mental diseases, the general principles of prevention, and the mental hygiene of

childhood, adolescence, adulthood, and old age.—*M. E. Morse* (Baltimore, Md.).

998. **Durfee, C. H.** Observations on the handling of problem drinkers with special regard to some popular misconceptions. *J. crim. Psychopath.*, 1941, 3, 278-288.—Some of the popular misconceptions regarding chronic alcoholics are that the drinker is a moral weakling, that he is the victim of some strange and incurable disease, that alcoholism is inherited, that an older drinker with a long drinking record is more difficult to help than a young man, that a solitary drinker is worse than a social one, and that alcohol must be rigidly kept from a patient during treatment. The author believes that his own successes in dealing with this problem are due primarily to his procedure of treating the drinker as an adult. A rational attitude toward his problem helps to lighten the patient's sense of guilt and relax him so that the artificial relaxation of alcohol is no longer necessary.—*A. Chapanis* (Yale).

999. **Duval, A. M., & Hoffman, J. L.** Dementia praecox in military life as compared with dementia praecox in civil life. *War Med.*, Chicago, 1941, 1, 854-862.—A study of more than 5000 schizophrenic cases admitted to Saint Elizabeth's Hospital, Washington, shows that the majority of those developing during military life differ from the insidious chronic type predominating in civil life in that the onset is abrupt, the course stormy, situational factors more important, and the prognosis better. Lack of guidance when problems become too heavy is a great factor. A particularly vulnerable type is "mother's boy," who develops catalepsy but makes a spectacular recovery when he learns that he is not to return to service and mother arrives on the scene. Men with latent homosexual tendencies may develop homosexual panic with suicidal attempts. The disillusioned soldier cannot escape practically from an intolerable situation and hence uses psychological methods. The above conditions are similar to "shell shock," an overwhelming conflict between the instinct of self-preservation and the sense of duty. The diagnosis lies between acute schizophrenia and hysteria, the mechanisms resembling the latter, the clinical picture and course, the former.—*M. E. Morse* (Baltimore, Md.).

1000. **Essen-Möller, E.** Psychiatrische Untersuchungen an einer Serie von Zwillingen. (Psychiatric investigations on a series of twins.) *Acta psychiat.*, Kbh., 1941, Suppl. 23. Pp. 201.—The author obtained from 10,000 patients admitted to Swedish mental hospitals 69 cases who had a twin of like sex. From information gathered on the non-hospitalized twin, 21 pairs were determined as monozygotic, and it is with the comparison of these that the study is mainly concerned. In the non-hospitalized twin characterological abnormalities were present which showed plainly the intimate connection between twins. These symptoms appear to be a more constant expression of the abnormal genotypical constitution than the psychotic type itself. However, some twins with conspicuous

differences in spite of their monozygosity were observed. Summary in English, photographs, bibliography.—*R. K. Meister* (Mooseheart Laboratory for Child Research).

1001. **Finger, F. W., & Schlosberg, H.** The effect of audiogenic seizures on general activity of the white rat. *Amer. J. Psychol.*, 1941, 54, 518-527.—30 male white rats were placed in individual spring-suspended cages which permitted a kymographic record of all activity. They were stimulated for varying periods by a Galton whistle driven by compressed air which produced a tone of 13,400 d.v./s. 11 rats showed 31 seizures. The seizures caused a slight (9.5%) but significant decrease in the total amount of activity during the 12 hours immediately following the seizure. During the next 12-hour period the decrease in amount of activity was 4.4%, which is significant at the 9% level (*t*-test). The animals that had seizures gained only 62% as much weight as those which had no seizures. These data are considered theoretically as further distinguishing audiogenic from neurotic seizures, and it is concluded that the changes in activity induced by the seizures are due to fatigue.—*D. E. Johannsen* (Skidmore).

1002. **Fry, C. C., & Rostow, E. G.** The problem of college mental hygiene. *Ment. Hyg.*, N. Y., 1941, 25, 552-567.—Experience at Yale suggests that psychiatric guidance for certain students whose behavior and goals are unorganized or who are troubled by problems of personal development or adjustment to the college environment is necessary. The growth of college mental hygiene is the responsibility of psychiatrists.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego).

1003. **Gibbons, M. A.** The use of the social worker in the treatment of anxiety neuroses. *Smith Coll. Stud. soc. Work*, 1941, 12, 187-188.—Abstract.

1004. **Goldstein, K., & Scheerer, M.** Abstract and concrete behavior; an experimental study with special tests. *Psychol. Monogr.*, 1941, 53, No. 2. Pp. 151.—The normal person is capable of abstract and concrete behavior, while the abnormal individual is confined to the concrete. "The abstract and concrete behaviors are dependent upon two corresponding attitudes. . . . The abstract and concrete attitudes are not acquired mental sets or habits of an individual, or special isolable aptitudes, such as memory, attention, etc. They are rather capacity levels of the total personality." The concrete attitude is realistic. The abstract attitude embraces more than the "real" stimulus in its scope and involves such modes of behavior as: the detachment of the ego from the outer world or from inner experiences, assumption of a mental set, verbalized accounting for one's acts, shifting from one aspect of a situation to another, holding in mind simultaneously various aspects of a problem, analysis and synthesis of aspects of a problem, abstraction of common properties, and planning ahead ideationally. 5 tests of the ability to assume the abstract attitude are presented and described: the Goldstein-Scheerer

Cube Test; the Gelb-Goldstein Color Sorting Test; the G. G. W. S. Object Sorting Test; the Weigl-Goldstein-Scheerer Color Form Sorting Test; and the Goldstein-Scheerer Stick Test.—D. G. Ryans (Co-operative Test Service).

1005. Haggerty, H. Pre-psychotic personality traits of women with involuntional melancholia. *Smith Coll. Stud. soc. Work*, 1941, 12, 191-192.—Abstract.

1006. Hamilton, S. W., Kempf, G. A., Scholz, G. C., & Caswell, E. G. A study of the public mental hospitals of the United States, 1937-1939. *Publ. Hlth Rep., Wash.*, 1941, Suppl. No. 164. Pp. i + 126.—This is a survey of the growth and activities of mental hospitals in the United States. Some of the 27 chapter headings are: historical note, classification of mental institutions, patient population, nonmedical personnel, special forms of treatment, special groups of patients, educational activities of mental hospitals, community service, family care, clinical records, medical research, cost of hospitalization, group classifications, comparison with standards of the American Psychiatric Association. The remaining chapters deal largely with administrative problems.—J. E. Zerga (U. S. Employment Service).

1007. Hinsie, L. E. Visual outline of psychiatry. New York: Oxford University Press, 1941. Pp. 109. \$2.00.—This book is a simple, systematic, and comprehensive outline of essential current concepts, principles, and central facts of psychiatry, illustrated throughout by direct examples. Subjects covered are mental hygiene, mental organization, psychiatric syndromes, and intellectual deficiency. An 11-page glossary and an index are given. Alternate pages are unnumbered and blank to permit the student to make notes.—M. H. Erickson (Eloise Hospital).

1008. Johnson, A. M., Falstein, E. I., Szurek, S. A., & Svendsen, M. School phobia. *Amer. J. Orthopsychiat.*, 1941, 11, 702-712.—This is a report of a fairly intensive clinical experience with 8 children treated at the Institute for Juvenile Research for the problem of school phobia, a deep-seated psychoneurotic disorder recognizable by the intense terror associated with being at school. The outstanding common factors in the initiation of school phobia are an acute anxiety in the child, an increase of anxiety in the mother, and a strikingly poorly resolved early dependency relationship of these children to their mothers. The case material shows how these 3 cardinal factors become interrelated in the production of the school phobia. In a discussion of this paper O. B. Markey reports somewhat less encouraging results than those of the authors. He believes that school phobia is not fundamentally a sign of disorder in the school-child relationship, but has its roots in a characterologic level long before the beginning of school life.—R. E. Perl (Jewish Board of Guardians).

1009. Karpman, B. Perversions as neuroses (the paraphiliac neuroses); their relation to psychopathy and criminality. *J. crim. Psychopath.*, 1941, 3, 180-199.—"Perversions (Paraphilias) are still regarded

quite universally by psychiatrists as belonging to the group of Psychopathies. The purpose of this presentation was to show that paraphilias are basically neuroses and should be recognized as such, that they have an intimate relationship to other neuroses, such as hysterical neuroses, with which they share many features in common. An attempt was made to demonstrate the points in common and the points in difference by the presentation of several relevant cases and pertinent discussions. The recognition is important not only from a clinical and theoretical standpoint but from a forensic point of view as well since these paraphilias and related reactions contribute most to sex crimes. It has been further submitted that the proper treatment for this type of case is psychotherapy just as it is for neuroses in general."—A. Chapanis (Yale).

1010. Kemble, R. P. Constructive use of the ending of treatment. *Amer. J. Orthopsychiat.*, 1941, 11, 684-691.—The author discusses the process of ending as it supplements the process of treatment. He considers indications for ending, objectives of the ending process, poor endings and their reasons, and the satisfactory ending. The patient's own development of the idea of ending is important; it strengthens him in his struggle towards independence. Though the process normally takes time, depending on the readiness of the patient and the therapist, the essential elements can be brought into endings made abrupt by circumstances, even in the space of a telephone call or a letter. Endings can be given definition and finality with great advantage to both patient and therapist. S. M. Lowry discusses this paper from the point of view of the evolution of interest in the different aspects of child guidance techniques.—R. E. Perl (Jewish Board of Guardians).

1011. Lemkau, P., Tietze, C., & Cooper, M. Mental-hygiene problems in an urban district. *Ment. Hyg., N. Y.*, 1941, 25, 624-646.—A statistical report on the Mental Hygiene Study of the Eastern Health District of Baltimore.—W. L. Wilkins (U. S. Marine Corps Base, San Diego).

1012. McCurdy, H. G. A note on the dissociation of a personality. *Character & Pers.*, 1941, 10, 35-41.—The personalities of Prince's Miss Beauchamp are briefly discussed in the light of psychoanalytic concepts, which were not well developed at the time Prince was studying this case. The problem of transference, the role of the physician (which Prince himself did not fully appreciate), is especially emphasized.—M. O. Wilson (Oklahoma).

1013. Menninger, W. C. A condensed neuropsychiatric examination for use by Selective Service Boards. *War Med., Chicago*, 1941, 1, 843-853.—Menninger's outline resembles that of Aita (see XV: 4650) and the revised *Medical Circular* No. 16 (see XV: 4674). It is designed for draft board members who are not primarily psychiatrists and also to suggest a practical abbreviated psychiatric examination. Its object is to forecast the man's stability under stress. The precipitating factors of maladjustments to military life are: separation from family;

class distinctions; compulsory routine; and, most important, threat of injury or death. Every registrant should be given a psychiatric examination, which should come last and utilize the observations of the other examinations.—*M. E. Morse* (Baltimore, Md.).

1014. *Miller, W. B.* A program for civilian mental health. *Publ. Hlth Rep., Wash.*, 1941, 56, 1453-1462.—*J. E. Zerga* (U. S. Employment Service).

1015. *Moerdyke, P. E.* A study of one hundred women developing psychoses after childbirth. *Smith Coll. Stud. soc. Work*, 1941, 12, 193-194.—Abstract.

1016. *Openshaw, R.* Some factors related to adjustment of schizophrenic patients five years after their first parole from a mental hospital. *Smith Coll. Stud. soc. Work*, 1941, 12, 192-193.—Abstract.

1017. *Palmer, H. D., Hastings, D. W., & Sherman, S. H.* Therapy in involutional melancholia. *Amer. J. Psychiat.*, 1941, 97, 1086-1115.—Current therapeutic techniques are evaluated, and the problem of the mental hygiene of the involutional period is discussed. "Our studies have shown that patients developing involutional melancholia suffer a breakdown in this era because of the culmination of many forces. The endocrine unbalance is not the primary factor and perhaps not always a significant one in the development of the mental disorder."—*R. Goldman* (Boston Psychopathic Hospital).

1018. *Pollack, H. M.* Is family care for mental patients safe for the community? *Ment. Hyg., N. Y.*, 1941, 25, 620-623.—In one year 2154 carefully selected patients were placed in family care. There was no proved crime and only one complaint. Family care patients have a better record for social behavior than the general run of persons living in any community.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego).

1019. *Repond, A.* Les problèmes scientifiques et pratiques communs à la psychiatrie et à la prévoyance en faveur des infirmes et des anormaux. (The scientific and practical problems common to psychiatry and to the care of invalids and abnormals.) *Praxis*, 1941, 30, 451.—Abstract.

1020. *Rethlingshafer, D.* Measures of tendency-to-continue: I. Behavior of feeble-minded and normal subjects following the interruption of activities. *J. genet. Psychol.*, 1941, 59, 109-124.—29 feeble-minded and 29 normal subjects, with MA's of 6 years to 9 years, 11 months, were interrupted in each of 11 different activities (puzzles, block-patterns, modeling animal figures, tracing, cutting designs from paper). Detailed analysis of 638 reactions to interruption permitted the development of a 17-class scale of "tendency-to-continue," from which a quantitative continuum with 12 differentiating classes was derived. In terms of this quantitative scale, both groups displayed the same kinds of response to interruption, but the feeble-minded were distributed at the low-resumption end, while normals were more numerous at the upper points on the scale. Thus, feeble-minded children did not

reveal a purportedly rigid "goal-fixation."—*D. K. Spelt* (Mary Baldwin).

1021. *Rethlingshafer, D.* Measures of tendency-to-continue: II. Comparison of feeble-minded and normal subjects when interrupted under different conditions. *J. genet. Psychol.*, 1941, 59, 125-138.—30 feeble-minded children (IQ's 42-70) and 30 normal children (IQ's 90-110), all with MA's of 6 years-9 years, 11 months, were subjects in experiments on "tendency-to-continue." Activity following simple interruption of a task was compared with response to interruption when (1) substitute tasks were available, (2) similar substitutes were available, (3) physical barriers to resumption, i.e. hiding the materials, was employed, (4) interruption involved destruction of the work done, and (5) many additional materials were on the table as possibilities for action. Normals displayed more resumption than the feeble-minded under all conditions but the 5th. Both the use of highly similar substitutes and the presence of physical barriers to resumption decreased resumption more for the feeble-minded than for the normal subjects.—*D. K. Spelt* (Mary Baldwin).

1022. *Risden, G.* Mental hygiene for ists. *Ment. Hyg., N. Y.*, 1941, 25, 614-619.—Blanket remedies for the political isms which youth are enthusiastic about must give way to individual treatment through application of mental hygiene principles.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego).

1023. *Ross, T. A.* Lectures on war neuroses. Baltimore: Williams & Wilkins, 1941. Pp. 116. \$2.00.—4 lectures on war neuroses are given for medical officers and general practitioners dealing with patients under war strains. The first covers symptomatology, its significances, and the personality purposes served. The second, acute war neuroses, discusses the conditions, personal and environmental, likely to cause acute neuroses and the therapeutic and prophylactic methods of dealing immediately and effectively with them. Emphasis is placed upon prompt and thorough treatment to preclude development of chronic neuroses. The last 2 lectures, chronic war neuroses, emphasize that these conditions are less responsive to treatment and that therapy to be effective must include consideration of the patient's past, present, and future situations, rather than just the immediate situation as is frequently the case in acute neuroses. Throughout the book pertinent illustrative clinical data is cited. In an appendix the author attributes the low incidence of neuroses in bombed cities to the effectiveness of immediate treatment of shock reactions by warmth, external and internal, and reassurance, to be followed by sedation if recovery was not prompt.—*M. H. Erickson* (Eloise Hospital).

1024. *Sargant, W., & Slater, E.* Amnesic syndromes in war. *Proc. R. Soc. Med.*, 1941, 34, 757-764.—Amnesia was found in 144 cases out of 1000 military neurotic casualties. Epileptics, schizophrenics, and cases of head injury were also present,

but the great majority were psychoneurotic cases, 83% of which showed indications of constitutional instability. In cases occurring under stress, such as the Flanders retreat, the amnesic syndrome showed 2 main manifestations, fugue and retrospective gaps in the memory of past stress. Patients developing fugues had more psychopathic traits than those who showed only a retrospective amnesia. The prominent affective features of amnesic symptoms are, in descending order of frequency: anxiety, hypochondriasis, depression, and paranoid symptoms.—*J. E. Zerga* (U. S. Employment Service).

1025. Seliger, R. V., & Rosenberg, S. J. **Personality of the alcoholic.** *Med. Rec., N. Y.*, 1941, 154, 418-421.—The authors conclude that there are no definitely distinguishing personality types among alcoholics, although certain personality factors such as emotional instability and escape reactions may be common. Treatment requires prolonged re-education of the patient's entire habit life.—*M. H. Erickson* (Eloise Hospital).

1026. Stainbrook, E. J. **A modified Rorschach technique for the description of transitory post-convulsive personality states.** *Rorschach Res. Exch.*, 1941, 5, 192-203.—Cards I, II, and III were presented to the subject after an electrically induced generalized convulsion as soon as he could respond, and the same cards were presented in the same order for the following 60 minutes. On the next treatment day, cards IV, V, and VI were similarly presented. Cards VII, VIII, IX, and X were used in like fashion on a third day. Then the responses to all cards were assembled into a composite Rorschach record for each 5 minute period after the convulsion. A Rorschach record obtained in this way without convulsion corresponded closely to one obtained under standard conditions. Illustrative data from the Rorschach records of a single patient show the order of reappearance of various determinants. Profiles at various time-distances from time of shock are discussed in some detail by the author.—*R. E. Horowitz* (New York City).

1027. Stengel, E. **On the aetiology of the fugue states.** *J. ment. Sci.*, 1941, 87, 572-599.—25 cases are each briefly described. 10 bore some relationship to epilepsy; there was no difference between the fugues of the epileptics and those of the non-epileptics. Nearly all bore some relationship to the affective reaction types. Social history revealed serious abnormality in the home life of 24 cases. In the majority of females the onset was related to menstruation.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego).

1028. Thomas, M. A. **Some problems in the evacuation of the mentally deficient in England.** *Ment. Hyg., N. Y.*, 1941, 25, 606-613.—High-grade feeble-minded adults can frequently do factory or agricultural work to contribute to the war effort. Ineducable imbecile children are frequently evacuated in groups with the teachers who are familiar with their problems.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego).

1029. [Various.] **Education for mental health: Fifth Yearbook of the Texas Society for Mental Hygiene.** *Univ. Texas Publ.*, 1941, No. 4145. Pp. 51.—The contents of this pamphlet consist mainly of 5 articles emphasizing the application of mental hygiene to education and the minutes of the Eighth Annual Meeting of the Texas Society for Mental Hygiene. One of the recommendations of the Society's Committee on Professional Education (L. Barbato, chairman) is "that the Society discourage the teaching of abnormal psychology as an undergraduate course." The Committee's report "was referred to the Executive Committee for study and action."—*S. G. Dulsky* (Rochester Guidance Center).

1030. Veit, G. **Erbbiologische Untersuchungen an Stettiner und Greifswalder Hilfschülern. Beitrag zur Genetik des Schwachsinns.** (Genetic investigations on special pupils in Stettin and Greifswald. Contribution to the genetics of feeble-mindedness.) *Z. menschl. Vererb.-u. Konst. Lehre*, 1940, 24, 265-308.—(*Child Develpm. Abstr.* XV: 1105).

1031. Vogel, V. H. **Our inadequate treatment of the mentally ill as compared with treatment of other sick people.** *Publ. Hlth Rep., Wash.*, 1941, 56, 1941-1947.—The importance of the mental hygiene clinic has not only been underemphasized, but such few clinics as do exist have been inadequately subsidized. The establishment of a nation-wide mental hygiene program, receiving both Federal and State support, is essential to the mental health of our civilian population in this present national and world crisis.—*J. E. Zerga* (U. S. Employment Service).

1032. Walthard, K. M. **De l'importance de l'attitude psychique chez les déficients physiques.** (The importance of the psychological attitude among the physically deficient.) *Praxis*, 1941, 30, 452.—Abstract.

1033. Washburne, A. C., & Hodgson, E. R. **Regression neuroses and schizophrenia; an analysis of forty cases in university students.** *Amer. J. Psychiat.*, 1941, 97, 1073-1085.—"The impressions resulting from a statistical study would indicate that the following symptoms and signs occurred twice as frequently in the schizophrenics as in the regression neuroses: (a) rigid personality, (b) extreme deficiency in good social attitudes, (c) narrow interests, (d) poor design for living, (e) tendency for suicidal ideas, (f) unsatisfactory school work, and (g) lack of insight."—*R. Goldman* (Boston Psychopathic Hospital).

1034. Werner, H., & Bowers, M. **Auditory-motor organization in 2 clinical types of mentally deficient children.** *J. genet. Psychol.*, 1941, 59, 85-99.—22 children with endogenous mental deficiency (positive family history, no apparent brain lesion) were compared with 26 mentally deficient children of exogenous type (definite brain lesion) and similar MA and IQ in the vocal reproduction of 17 melodic patterns played on a piano. Children of endogenous type responded more like normal children, and their errors

were mainly retrogressions to simpler forms. Children of exogenous type showed much more incoherent procedures not found among normal children. Since these differences had previously been shown to characterize the visuo-motor performances of the 2 groups (see XIV: 1278), the factors responsible seem to be of a general, inter-sensorial nature.—*D. K. Spelt* (Mary Baldwin).

1035. Wertham, F., & Golden, L. A differential-diagnosis method of interpreting mosaics and colored block designs. *Amer. J. Psychiat.*, 1941, 98, 124-131.—The subject selects colored wooden pieces of any shape and color he likes and then uses them to make any kind of design he may wish. Normal subjects use many different shapes and colors and make full designs, harmoniously colored and distinct in configuration. Examples are given of the distinct types of responses given by schizophrenic, paraphrenic-paranoid type, depressive, mentally deficient, and organically damaged patients. This test has wider diagnostic range and greater objectivity, simplicity, and speed than the Rorschach test.—*R. Goldman* (Boston Psychopathic Hospital).

1036. Williams, E. H., & Wright, C. A. The adrenal cortex and psychotic states. *Med. Rec.*, N. Y., 1941, 154, 411-416.—Continuing with their previous study (see XVI: 227), the authors discuss in detail 6 case histories disclosing clinical evidences of a relationship between adrenal cortex disorders and psychoses.—*M. H. Erickson* (Eloise Hospital).

1037. Wyatt, G. L. Voice disorders and personality conflicts. *Ment. Hyg.*, N. Y., 1941, 25, 237-250.—Symptoms of functional voice disorders are classified in 3 ways: hyperfunction of muscles concerned (spasticity), hypofunction of vocal muscles (incomplete closure of the glottis), and combination of both forms. Treatment attempts to establish relaxation or to reestablish muscular strength and accuracy of phonation. When a patient develops other symptoms as his voice is rapidly improving, his case should be treated as organ neurosis. Phonasthenia (neurotic voice disturbance) is distinguished from stuttering (neurotic speech disturbance).—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego).

[See also abstracts 867, 917, 967, 986, 1053, 1054, 1113, 1114, 1122, 1145, 1213, 1220, 1239, 1267, 1271, 1286.]

PERSONALITY AND CHARACTER

1038. Allport, G. W., Bruner, J. S., & Jandorf, E. M. Personality under social catastrophe: ninety life-histories of the Nazi revolution. *Character & Pers.*, 1941, 10, 1-22.—The life histories were chosen from more than 200 histories covering the periods before and after 1933. Analyses revealed the following tendencies: (1) Realization of and adjustment to catastrophe are very slow and inadequate. (2) Despite catastrophic social disorganization, basic personality structures persist. (3) Under impact of such crisis the distribution of

political attitudes becomes asymmetrically bimodal. The majority swings to the party in power and the minority (the present group) develops extreme opposition. (4) Reactions to attendant frustrations are such as resignation, adoption of temporary frames of security, heightened in-group feelings, shifts in the level of aspiration, regression and fantasy, conformity, changes in philosophy of life, aggression (direct or indirect), and, especially, planning and direct action (escapes, concealing contraband property, etc.). (5) The persecutor may suffer acute pangs of conscience and conflict resulting from his persecutions. Implications of these findings for America in her present national emergency and the possible effect of the Nazi regime upon the integrity and morale of the persecutor are briefly suggested.—*M. O. Wilson* (Oklahoma).

1039. Bañuelos, M. Personalidad y carácter. (Personality and character.) Madrid: J. Morata, 1941.—[Abstracted review; original not seen.] Various problems in the field of personality are discussed in the light of recent theories, which are also treated critically. Topics include: constitution, typologies, heredity, sex differences.—*H. D. Spoerl* (American International College).

1040. Child, I. L., & Sheldon, W. H. The correlation between components of physique and scores on certain psychological tests. *Character & Pers.*, 1941, 10, 23-34.—College students were divided into endomorphic (round, soft), mesomorphic (square, hard, muscular), and ectomorphic (tall, fragile) groups. A secondary class, gynandromorphic (relative predominance of characteristics of the opposite sex), was also used. Physical measurements for each of these somatypes were correlated with scores on tests of verbal aptitude, mathematical achievement, ascendance-submission, masculinity-femininity, and sexual inversion. Both correlations and differences of scores show, as in previous studies, that there is continuity between physical and psychological constitution. However, the values are very low, either unreliable or on the verge of reliability.—*M. O. Wilson* (Oklahoma).

1041. Eisenberg, P., & Wesman, A. G. Consistency in response and logical interpretation of psychoneurotic inventory items. *J. educ. Psychol.*, 1941, 32, 321-338.—Yes, No, and ? responses and interpretations of these responses were obtained from 170 summer session students on 26 (13 "good" or discriminative and 13 "poor" or non-discriminative) items. One month later the procedure was repeated. Consistency of response, consistency of interpretation, and logicity of interpretation were found to be high. "Good" items are characterized by a greater evidence of neurotic (yes) response. The "best" items are less consistent and logical in interpretation. Hypotheses to explain these findings are discussed, and the necessity for more careful selection and wording of questions and for a technique to obtain both the individual's responses and his attitude toward the responses is stressed.—*J. W. Macmillan* (Maryland).

1042. Fisher, V. E., & Watson, R. I. An inventory of affective tolerance. *J. Psychol.*, 1941, 12, 149-157.—By affective tolerance the authors mean "the total capacity which an individual possesses for dealing with his affective tensions as such." Emotional excitement is something which an individual may or may not endure without the development of nervous symptoms. This capacity appears to be relative to his capacity to discharge his tension and his ability to give subjectively appropriate form and direction to his tension. These, in turn, depend upon the environment. A preliminary inventory of 150 items was given to 250 students, and on the basis of the results obtained 61 items possessing adequate internal validity and discriminatory weights were selected for a revised scale. This scale was administered to 152 students, the mean scores revealing that males have greater affective tolerance than females. The scale was also given to groups of selected normals, psychoneurotics, and hospitalized psychotics of both sexes. It was found that the scale yields significant differences in mean scores between normals and neurotics but not between normals and psychotics.—F. A. Mole, Jr. (Connecticut).

1043. Fleischer, R. O., & Hunt, J. McV. A communicable method of recording areas in the Rorschach test. *Amer. J. Psychol.*, 1941, 54, 580-582.—D. E. Johannsen (Skidmore).

1044. Hampton, P. Language difficulties of the Bernreuter Personality Inventory. *J. educ. Psychol.*, 1941, 32, 471-473.—The Bernreuter Inventory was given to 70 retail grocers of 11 nationalities who could all read, write, and speak English. Large percentages did not understand many of the terms used in the Inventory. Synonyms more commonly used (according to Thorndike's world lists) were substituted for these terms, and the resultant Inventory was given to 45 additional grocers. Of the substitutes for the original 20 words and phrases not understood only 4 remained not understood by only a small percentage of the subjects.—J. W. Macmillan (Maryland).

1045. Hart, H. New gateways to creative living. New York: Abingdon-Cokesbury, 1941. Pp. 197. \$1.75.—(*Educ. Abstr.* VI: 1337).

1046. Kerck, E. Mehrfacharbeit und Konstitutionstypus. (Manifold tasks and constitutional type.) *Z. menschl. Vererb.- u. Konst. Lehre*, 1940, 24, 337-347.—(*Child Developm. Abstr.* XV: 1072).

1047. Munroe, R. Inspection technique; a modification of the Rorschach method of personality diagnosis for large scale application. *Rorschach Res. Exch.*, 1941, 5, 166-190.—To try out the possibility of adapting the Rorschach principles of diagnosis to large scale testing, procedures were developed for reviewing the protocol quickly and systematically, recording important deviations on a check list, making a rating on general adjustment, and writing a descriptive sketch of the personality. Average time per protocol was 15 minutes. In a validation experiment subjects were 101 female

college freshmen. The Rorschach rating was superior to scores on the Bernreuter inventory and the American Council Test of Scholastic Aptitude in predicting academic failure and maladjustment. The check list used consists of 24 items, to be checked after reading of the protocol by an examiner who understands scoring and interpretation thoroughly.—R. E. Horowitz (New York City).

1048. Watson, R. I., & Fisher, V. E. An inventory of affective potency. *J. Psychol.*, 1941, 12, 139-148.—On the basis of an analysis from a clinical point of view the authors conclude that a dimension of emotionality which they term affective potency has been neglected. This appears to have 3 aspects; strength, duration, and number. Strength refers to the intensity of the response, i.e. the amount of energy expended per unit time; duration, to the factor of how long an individual's emotional responses persist after they have been aroused; and number, to the frequency of emotional responses or arousals. A preliminary inventory of 120 items was devised and given to 250 students; from the results an internally valid scale of 54 items was selected. This form was then administered to 152 students and a retest with the number category absent given again to 50 female students. It was found that in all 3 aspects of potency the females have higher mean scores. The authors outline the procedure followed in devising the scale and assigning weights to the various items and in addition present the correlations obtained from comparing the scores obtained from this scale with other personality scales.—F. A. Mole, Jr. (Connecticut).

1049. Zubin, J. A quantitative approach to measuring regularity of succession in the Rorschach experiment. *Character & Pers.*, 1941, 10, 67-78.—By adopting the null hypothesis and using the mean contingency coefficient technique, the author develops a quantitative index for determining the presence of a preference for either progressive or regressive shifts (*D* to *W*, *W* to *D*, etc.) in Rorschach responses. The index bears some relationship to diagnostic categories and to conventional clinical estimates of shift or succession.—M. O. Wilson (Oklahoma).

[See also abstracts 992, 1025, 1080, 1120, 1168, 1182, 1185, 1191, 1197, 1215, 1261, 1287.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

1050. Alpert, R., & Sargent, S. S. Conservatism-radicalism measured by immediate emotional reactions. *J. soc. Psychol.*, 1941, 14, 181-186.—Attitudes can be measured by instructing subjects to respond to terms on a 5-point like-dislike scale. Results for 93 subjects for 24 terms showed a reliability of .88 and a correlation of .71 with Lentz's C-R Opinionaire. This gives further evidence of the generality of conservative-radical attitudes.—G. Brighouse (Occidental).

1051. Ames, E. S. **Morale and religion.** *Amer. J. Sociol.*, 1941, 47, 384-393.—Religious observances have been traditionally associated with the feeling of group welfare. New critical inquiries into the nature and history of religion have weakened traditional morale. It is being recovered to some extent by new forms of religion which are more self-critical, scientifically reasonable, humanitarian, and in other ways confirmatory of the recognized values in modern culture. This new religion is vitally democratic in spite of changes in democracy itself, and is therefore significant for the morale of the nation.—D. L. Glick (Brown).

1052. Angell, J. R. **Radio and national morale.** *Amer. J. Sociol.*, 1941, 47, 352-359.—Since morale includes intellectual and emotional factors, it requires facts and motives to keep it vigorous. Both the radio and the press make their impact on these areas. The radio has a psychological advantage over the newspaper in that it requires less effort to listen than to read and in that the radio's message is carried by a human voice. Furthermore, its news is reported more quickly and to a larger audience. The movie requires the exertion of going to a theater but can exploit the principles of crowd psychology. There is substantially no limit to the type of morale-promoting techniques which the radio can employ. A central organizing body is needed to co-ordinate the activities of all morale-promoting agencies.—D. L. Glick (Brown).

1053. [Anon.] **The behavior of Germany.** *Nature, Lond.*, 1941, 148, 477-481.—This is a lay discussion of Bayne's analysis of the German temperament in his recent book (see XVI: 1054). The thesis that the Germans are manifesting a mass hysterical outbreak is defended. It is maintained that we must so regard their behavior, since otherwise our reasoning would lead us to deny the obvious fact that the German people are absolutely sincere in their war effort and in their devotion to Nazi principles.—N. R. Bartlett (Brown).

1054. Baynes, H. G. **Germany possessed.** London: Jonathan Cape, Ltd., 1941. Pp. 305. 16s.—[Abstracted review; original not seen.] Herein is set forth the view that the collective unconscious of the German people has been swept into an hysterical outbreak.—N. R. Bartlett (Brown).

1055. Bean, K. L. **Negro responses to certain intelligence test items.** *J. Psychol.*, 1941, 12, 191-198.—The author reports his observations of the responses of 102 Negroes to various intelligence tests. The subjects, of both sexes and aged from 3 to 37 years, were compared with a closely corresponding group of whites. Characteristic Negro responses arising from influence of environment, limitations of vocabulary, lack of ability to follow instructions, difficulty with abstract thinking and moral judgment are considered as factors in giving a possibly unfair, invalid picture of Negro intelligence.—F. A. Mote, Jr. (Connecticut).

1056. Bogardus, E. S. **National morale.** *Sociol. soc. Res.*, 1941, 25, 203-213.—The essence and

strength of national morale lie in: (1) the appreciation of people generally of specific values their country affords, (2) an understanding of and belief in national principles, (3) identification by the individual of his interests with national welfare, and (4) confidence in the nation's leaders.—O. P. Lester (Buffalo).

1057. Bowman, B. A. **The morale of continental and militia troops in the War of the Revolution.** (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1941. Pp. 355. \$4.44.—See *Microfilm Abstracts*, 1941, 3, No. 2, 54-55.

1058. Carter, T. M. **Comparison of the attitudes of college men with the attitudes of college women in regard to fellowship behavior.** *J. soc. Psychol.*, 1941, 14, 145-158.—In a rating scale study of reactions of college men and women toward fellowship behavior (1) behavior of men toward women, (2) women's behavior, (3) behavior common to both men and women was studied. It was concluded that "women are generally more forceful in expressing their attitudes than are men;" men and women agree on some items, and disagree markedly on others. From this study it would be possible to set up continua of items arranged from least to most approved, which would have considerable practical value in counselling.—G. Brighouse (Occidental).

1059. Cot, P. **Morale in France during the war.** *Amer. J. Sociol.*, 1941, 47, 439-451.—The morale factor was the chief cause for the collapse of France. When war broke out, nothing was done by the government to mobilize the moral resources of the country and to emphasize the ideological content of the war. The author points out the weaknesses in the morale of the officers and general staff of the army. Morale in France after the armistice is discussed, the author pointing out that the general feeling of apathy is giving way to a revival of antifascist and democratic feeling.—D. L. Glick (Brown).

1060. Cottrell, L. S., Jr., & Gallagher, R. **Important developments in American social psychology during the past decade.** *Sociometry*, 1941, 4, 302-324.—While the most important developments, discussed in the preceding section (see XV: 4736), have been in orientation, certain developments in quantitative and experimental technique may be examined. With the growth of precise mensuration an atomistic approach developed, leading to 2 problems: the integration of isolated bits of behavior (usually approached either mathematically, or less formally, with a quantitative check on the insights), and the relation of behavior to situational contexts. Experimentally, there is evidence of attempts to make the complex situation explicit in the laboratory context. In the coming decade social psychologists must define their subject matter and their research goals, and no longer remain content with their "brokerage function." The subject matter of social psychology is that of all other social sciences, its definition must reside in the nature of its operations. Suggestions are offered toward making social

psychology an operational science.—*L. J. Stone* (Vassar).

1061. Cottrell, L. S., Jr., & Gallagher, R. *Developments in social psychology 1930-1940. Sociometry Monogr.*, 1941, No. 1. Pp. 58.—See XV: 4736 and XVI: 1060.—*L. J. Stone* (Vassar).

1062. Creel, G. *Propaganda and morale. Amer. J. Sociol.*, 1941, 47, 340-351.—Since the morale of the front line derives directly from the morale of the civilian population from which the armed forces are drawn, the mind of a nation must be mobilized no less than its man power. Public opinion is a major force and must be informed. Any form of censorship and any attempt to suppress, twist, or conceal will impair the popular confidence that is the heart of morale. A free people must be given facts and permitted to do their own thinking. Propaganda, the fight for the promotion and maintenance of morale, can have no other basis than honesty and candor to secure steadfast public support. Examples are given of effective propaganda in the American Revolution and the first World War. It is emphasized that idealism is basic in morale.—*D. L. Glick* (Brown).

1063. Davis, S. R. *Morale in fascist Italy in wartime. Amer. J. Sociol.*, 1941, 47, 434-438.—The outcome of Italian military ventures in Albania and Libya was a consequence of the failure of fascist propaganda on the home front. By means of the foreign press, short-wave radio, and the grapevine the Italian people have kept surprisingly well informed. It appears that the Italians would rather lose to the British than to the Germans.—*D. L. Glick* (Brown).

1064. Day, D. D. *Methodological problems in attitude research. J. soc. Psychol.*, 1941, 14, 165-179.—Preparation of a technical handbook for research workers in the attitude field has brought about the following suggestions: (1) Reliability increases up to a certain point as the length of the scale increases. (2) Indicators should be brief and as close as possible to behavior. (3) Differentiation should be made between no attitude tendency and unexpressed or undecided attitude. (4) Group comparison seems more reliable than simultaneous sorting method. (5) Serial order of items is preferable as it facilitates scoring and does not affect reliability. (6) Mean and median scores, both, may be reliable, depending on the scale. (7) Generalized scales are useful when not too long, too general, and when the scale of judgments is valid. (8) Effect of signature on attitude scale has been exaggerated, but the effect of different levels of education on attitude must be considered.—*G. Brighouse* (Occidental).

1065. Durant, H. *Morale and its measurement. Amer. J. Sociol.*, 1941, 47, 406-414.—Morale is the relationship of a group to a given end. At present it is likely that the specific factors affecting morale are not the same in any two countries. While it is difficult to find measurable indices of civilian morale, such indices may be selected and used. The Min-

istry of Information in Britain has used the public opinion survey for measuring morale as well as the more detailed methods used by Gallup. A study made by P. Lazarsfeld and associates suggests the possibility of using the panel method as a technique of inquiry for ascertaining morale under war conditions.—*D. L. Glick* (Brown).

1066. Eickstedt, E. v. *Forschungen in Süd- und Ostasien. I-V.* (Researches in south and east Asia. I-V.) *Z. Rassenk.*, 1938, 8, 294-333; 1939, 10, 1-67, 120-162; 1940, 11, 21-79, 115-153.—[Abstracted review; original not seen.] Of the 100 subject headings of this anthropological work the following are of psychological interest: (17) race and art, (23) folk psyche and musicology, (24) Siamese typology, (27) character of the Lao, (67) problems of music-psychological anthropology, (70) marginal notes on psychology, (71) the Annamite psyche.—*H. L. Ansbacher* (Brown).

1067. Emme, E. E. *Supplementary study of superstitious belief among college students. J. Psychol.*, 1941, 12, 183-184.—Results of this study are similar to those of a previous study by the author and show that (1) specific instruction reduces belief in superstitions, (2) there is no significant correlation between emotion and belief in superstition, and (3) there is a strong negative correlation between intelligence and belief in superstition.—*F. A. Mote, Jr.* (Connecticut).

1068. Estorick, E. *Morale in contemporary England. Amer. J. Sociol.*, 1941, 47, 462-471.—Morale explains in great measure the resistance of England to the numerically superior forces of the Axis. The subject is divided into 5 sections: (1) morale defined; (2) Britain keeps its finger on public morale; (3) Britain works to bolster and maintain its morale; (4) Germany wages war against British morale; and (5) what Englishmen expect out of this war.—*D. L. Glick* (Brown).

1069. Fearing, F., & Krise, E. M. *Conforming behavior and the J-curve hypothesis. J. soc. Psychol.*, 1941, 14, 109-118.—Allport's conclusions may be the result of lumping too many variations in behavior together at one extreme of behavior, thus producing the backbone of the J, when valid scaling of behavior deviations would produce a normal curve. Observations of a traffic situation support this conclusion.—*G. Brighouse* (Occidental).

1070. Ferguson, L. W. *The stability of the primary social attitudes: I. Religionism and humanitarianism. J. Psychol.*, 1941, 12, 283-288.—Results obtained from the administration of an attitude scale to students of Stanford University in 1937 and the isolation from these data of 2 primary social attitudes, religionism and humanitarianism, by factor analysis have been reported. In order to obtain data bearing upon the problem of the stability of these primary attitudes the scale was given to 178 students of the University of Connecticut in 1941, and these results were compared with the results previously obtained. The factors of time, geographical location, and the world events which have oc-

curred in the intervening 4 years could have operated to make the results of the second administration different from the first. No differences of any significance were found so that it would appear that the 2 primary factors are operationally stable attitudes.—*F. A. Mote, Jr. (Connecticut).*

1071. **Fitch, L., & Remmers, H. H.** What the college student thinks of government. *J. soc. Psychol.*, 1941, 14, 187-194.—A freshman class in a course in American institutions, consisting of 565 men and women, showed, at the opening of the semester, general attitudes opposed to much change in the present standards of government. A second administration of the questionnaire at the end of the semester showed some shift of opinion on all questions, and, with the exception of two questions relating to the Supreme Court, the shifts were all in a direction of favoring change.—*G. Brighouse (Occidental).*

1072. **Fromm, E.** Escape from freedom. New York: Farrar & Rinehart, 1941. Pp. ix + 305. \$2.50.—The author presents a social diagnosis in terms of the "dynamics of the psychological processes operating within the individual." "It is the thesis of this book that modern man . . . has not gained freedom in the positive sense . . . ; that is, the expression of his intellectual, emotional and sensuous potentialities. Freedom . . . has made him isolated and, thereby, anxious and powerless. This isolation is unbearable, and the alternatives he is confronted with are either to escape from the burden of this freedom into new dependencies and submission, or to advance to the full realization of positive freedom. . . ." The psychological and historical backgrounds of freedom and individualism are traced through the Reformation period. Later chapters deal with: mechanisms of escape—authoritarianism, destructiveness, conformity; the psychology of Nazism; and freedom and democracy. The theoretical basis is developed in an appendix. The common traits of a group constitute social character, developed out of common experiences and living. Socially, it "internalizes external necessities and thus harnesses human energy for the task of a given economic and social system." But "human nature has a dynamism of its own that constitutes an active factor in the evolution of the social process." The points of difference in this approach from those of Freud, Marx, and Max Weber are suggested.—*L. J. Stone (Vassar).*

1073. **Gallup, G.** Question wording in public opinion polls: comments on points raised by Mr. Stagner. *Sociometry*, 1941, 4, 259-268.—This is a reply to an article by Stagner (see XVI: 1099). American Institute of Public Opinion studies show that differences of wording are ineffective when the "no-opinion" vote is small and opinions are well crystallized. Most war issues are of this kind. While Stagner criticizes the Institute for too many subjective questions, Floyd Allport has criticized it for exactly the opposite. Stagner distorts Blankenship's categories, using "positive" not in a gram-

matical sense, as affirmative interrogative, but as stating an interventionist proposal. Thus he objects not to the wording, but to the content of the questions. The most recent (August 1941) *Fortune* and Gallup surveys show practically identical results. The Institute has sometimes erred in the use of prestige-bearing names, but analysis of several questions shows that this has little effect on crystallized opinions. The Institute's sampling procedures are still being refined. On war issues it gives equal weight to men and women and proper weight to each economic group. Certain drawbacks in the use of multiple-choice questions are discussed.—*L. J. Stone (Vassar).*

1074. **Gomez Robleda, J.** La cara de los Tarascos. (The Tarascan face.) *Rev. mex. Sociol.*, 1941, 3, No. 2, 83-91.—The author reports a psychological and physiological study of the faces and masks of the Tarascans, a tribe of Indians. The facial features of this tribe show evidences of both hypogonadism and hypothyroidism. The expression of the face gives the observer the impression of indifference, depression, and introversion. An anthropological discussion of the structures of the head and face is also given.—*J. W. Nagge (Emporia State).*

1075. **Goodenough, F. L.** Month of birth as related to socio-economic status of parents. *J. genet. Psychol.*, 1941, 59, 65-76.—Birth months of 3,275 children were tabulated according to parental socio-economic status. In the 3 lowest occupational groups, births were nearly equally divided among the 4 seasons; but in the 3 highest groups, a statistically significant decrease in winter births was accompanied by an increase in spring and summer births. These data, together with questionnaire replies from 7 leading pediatricians in the city of Minneapolis and 33 women from a superior residential district, indicate that parents of superior socio-economic and intellectual status arrange for the births of children in the desirable spring months. This appears to account for the small but consistently observed differences in intelligence of children grouped according to birth month.—*D. K. Spelt (Mary Baldwin).*

1076. **Grassé, P. P.** La reconstruction du nid et le travail collectif chez les termites supérieurs. (Reconstruction of the nest and social activity in the higher termites.) *J. Psychol. norm. path.*, 1939, 36, 370-396.—The writer describes in detail the social nest-building activity of termites placed in a novel experimental environment. The mediation of the cooperative behavior, including distance perception of the state of affairs in the various parts of the structure, seems to depend upon an olfactory sense, the chemoreceptors for which are considerably specialized. But the coordinated responses are more than chemoreceptive reflexes, for their plasticity is evident in the adaptation to an entirely new situation. The writer posits a psychological faculty which is "neither truly instinctive nor conscious and which nevertheless gives the termites a knowledge of certain properties of the

external world which becomes the basis for action." The non-vertebrate nervous system may be characterized by such a capacity, not of an intellectual nature, but nevertheless permitting a variety of behavior not traditionally associated with the concept of inherited instinctual patterns.—*F. W. Finger* (Brown).

1077. **Greene, J. E.** Interregional migration of psychological talent. *J. soc. Psychol.*, 1941, 14, 119-128.—A survey of the 1219 psychologists in the 6th edition of *American Men of Science* indicates the following decreasing rank order of migration: (1) from region of nativity to region of present employment, (2) from region of nativity to region of first employment, (3) from region of training to region of present employment, (4) from region of first employment to region of present employment, (5) from region of nativity to region of training, (6) from region of training to region of first employment. Migration of psychologists is also summarized according to level of training and regional differences.—*G. Brighouse* (Occidental).

1078. **Hocking, W. E.** The nature of morale. *Amer. J. Sociol.*, 1941, 47, 302-320.—Morale can be defined as a healthy state of will as a man or group confronts its objective, a state of "willingness," the mental counterpart of physical fitness or "condition." The main element in morale, freedom, must not be lost sight of. The conception of morale has been extended between the wars by learning from the morale of remarkable social movements, which have been of 2 main types: one, highly focused and theorized, with sentimental extravagance trained about a personal leader; the other, diffuse, growing its creed, directly responsible to the realities of the social situation. These examples enforce the fact that morale is a democratic element in group psychology whatever the structure of the group. Distinction between individual and group morale shows to what extent the individual in a group retains his initiative if morale is normal. Distinction between positive and negative objectives shows the psychological advantage of the morales of anger, hatred, and fear. Distinction between organic and idea-factors shows the primary role of belief and of the concept of "importance." Distinction between virginal and mature morale shows the increasing weight of intellectual elements and of the veracity of feeling.—*D. L. Glick* (Brown).

1079. **Horton, P. B.** The Church as a socializing agency. *J. educ. Sociol.*, 1941, 15, 46-54.—A questionnaire, one section of which considered attitudes toward Christianity and the Church, was submitted to a presumably representative group of students in a Midwestern state university. 300 anonymous responses were secured in the classroom. The attitudes of these students toward Christianity and the Church were predominantly favorable. From a review of the results several general principles are proposed for augmenting the effectiveness of the Church as a social institution.—*D. G. Ryans* (Co-operative Test Service).

1080. **Jennings, H. H.** Individual differences in the social atom. *Sociometry*, 1941, 4, 269-277.—Moreno defines the social atom as "the sum of interpersonal structures resulting from the operation of reactions of choice and rejection centered about a given individual." Approximately 450 institutionalized girls were tested on 2 occasions, 8 months apart, under conditions permitting unlimited expression of choice and rejection. In addition to certain results elsewhere reported, it was found that "the choice process in a community does not vary randomly," and that this special character of the process must appear also in the individual social atoms. Of the 64 possible choice-rejection patterns (variation from the average on each of the choice and rejection scores) only 52 appeared, and only 10 were shown by 5 or more persons. The findings are illustrated in detail with the choice and rejection patterns of the leaders and isolates of the group. "From the few findings presented in this paper, it may be concluded that individual differences in interrelations between well-chosen individuals and individuals who are unchosen-or-nearly-unchosen members of a population appear not to be limited to the contrasting degree to which they are chosen but are reflected in the social atom in such manner that it is structured by various patterns, some typical for the former group and some typical for the latter group."—*L. J. Stone* (Vassar).

1081. **Jennings, H. S.** The transition from the individual to the social level. *Science*, 1941, 94, 447-453.—In the behavior of a clone (a large group of paramecia all descended from one parent) the author finds a social organization of some complexity. These clones pass through stages of immaturity, adolescence, sexual maturity, and old age. Among mature clones are found representatives of 3 different varieties and of the 16 different sex types that constitute the 3 varieties. The individuals are functionally differentiated and react to each other in a highly selective way so that in some respects the social system is complex, resembling that in some higher organisms. "The social organization connected with family life is of such a type as to form a natural step in the evolution of social systems, suggesting a unity throughout the world of organisms in respect to these matters."—*F. A. Mote, Jr.* (Connecticut).

1082. **Katzoff, E. T., & Gilliland, A. R.** Student attitudes on the world conflict. *J. Psychol.*, 1941, 12, 227-233.—A scale of 25 points has been devised in order to obtain a measure of attitudes toward American participation in the European conflict (see XV: 2290). It was administered to 16 groups of students in Northwestern University from May 1940 through June 1941 and to a total of 1441 students in 8 other colleges in the spring of 1941. For all groups there was found the distinctly bimodal distribution usually obtained when attitudes toward a highly controversial issue are measured, the mode representing desire to participate being found among those living in regions most likely to be attacked, and the mode representing the opposing attitude.

among those in regions having less likelihood of attack. For the groups given the scale repeatedly there were found shifts which reflected reactions toward significant political and military events which occurred at the time.—*F. A. Mote, Jr. (Connecticut).*

1083. **Kerr, W. A., & Remmers, H. H.** The cultural value of 100 representative American magazines. *Sch. & Soc.*, 1941, 54, 476-480.—The 44 judges selected for the experiment were professors in psychology, education, sociology, English and allied subjects, scientists, artists, 2 housewives, and 16 students in various fields. According to their own interpretation of cultural value they rated those of 100 typical magazines with which they were familiar on a 5-point scale. The average ratings are given. On the basis of these the magazines were grouped into 4 classes. A high degree of reliability ($.96 \pm .02$) was found by comparing the ratings of these groups by half the judges with those of the other half. The validity of the ratings was evidenced by a comparison of the advertising carried in the magazines and by a supplementary study of 1300 homes which showed that the highly rated magazines were found in the homes of higher environmental status. These were also homes of higher economic status, which finding may be related to the fact that the better the magazine, according to these ratings, the more it costs.—*M. Lee (Chicago, Ill.).*

1084. **Krauss, W. W.** Race crossing in Hawaii. *J. Hered.*, 1941, 32, 370-378.—The population of Hawaii consists of 65,000 Hawaiians and Part-Hawaiians, 110,000 Euro-Americans, and 250,000 Asiatics (of whom 160,000 are Japanese). Since many of these intermarry, the resulting admixtures afford ideal study materials in racial crossings, particularly since socio-environmental policies have been equally favorably extended to all groups. 10 families of mixed descent were investigated, with attention specially directed to personality manifestations. Conclusions are that bodily and mental variability of each parent race, rather than any racial averages of matings, are the important factors, conditioning a high variability among the crosses. Human race hybrids cannot be compared with crosses between sub-human pure strains in a genetics laboratory, nor can analogies be drawn. Certain concepts with respect to noxious biological effects resulting from crossing races having disproportionate characters could not be verified. Neither could support be found for the concept of hybrid vigor or its opposite, pauperism. Mental differences between races are conditioned by the higher or lower frequencies of the same mental qualities appearing in all races. The cultural influence of any group is displaced on the whole by the effect of American culture. For any hybrid, "personality takes precedence of race." 12 photographs.—*G. C. Schwesinger (American Museum of Natural History).*

1085. **Kris, E.** Morale in Germany. *Amer. J. Sociol.*, 1941, 47, 452-461.—Morale in totalitarian and democratic countries cannot be compared with-

out full realization of the impact of the differences in government and social organization on the group. National Socialism creates special conditions affecting group morale. Weak spots in German morale and the countermeasures adopted by the authorities, especially morale prophylaxis in the field of propaganda, are discussed. The method of this prophylaxis is intimately related to the National Socialist doctrine of psychological management in general. Magic protection through supreme leadership and the covenant of the hated against those who want to destroy them are described as two main trends in German psychological defense.—*D. L. Glick (Brown).*

1086. **Landis, J. M.** Morale and civilian defense. *Amer. J. Sociol.*, 1941, 47, 331-339.—Morale is a particular state of mind shared by members of a group. It consists of the devotion of men to an idea for which they are ready to make any sacrifice. Civilian defense and civilian morale are built on total participation. Civilian morale requires the reactivation of democratic ideals and the acceptance by the American people of their responsibility for total defense efforts.—*D. L. Glick (Brown).*

1087. **Lindeman, E. C.** Recreation and morale. *Amer. J. Sociol.*, 1941, 47, 394-405.—The sources of morale are a confident attitude toward the future, the capacity to behave efficiently under pressure, and a certain variety of perspective. Morale is a resultant of work, play, and understanding. Morale can be generated through recreation, and the behavior learned in sport can be an aid in facing problems. Recreation workers should realize therefore that they are both leaders and educators.—*D. L. Glick (Brown).*

1088. **Maunier, R.** Psychologie collective de la répugnance aux colonies. (The group psychology of repugnance in colonies.) *J. Psychol. norm. path.*, 1939, 36, 540-547.—There are always, in colonized regions, mutual feelings of aversion between the original habitants and the governing settlers. The groups usually maintain distinctly separate status in relation to trade, everyday living, and marriage, and for this reason do not assimilate each other. At the base of the repugnance is aggression (or repression) and resistance to the aggression, the conquerer-vanquished relationship. The initial feeling is usually aggravated by such legislative control as segregation of living areas and other fundamental restrictions. In addition there are basic conflicts in type of reasoning (logic vs. prelogic) and clashes of mores and folkways. It is of great importance for the dominating group to obtain insight and understanding of the intellectual and moral standards of the subjugated group, so the latter can with minimum resistance be brought into the imposed new order.—*F. W. Finger (Brown).*

1089. **Moore, J. E.** A comparison of negro and white children in speed of reaction on an eye-hand coordination test. *J. genet. Psychol.*, 1941, 59, 225-228.—White children (43 boys, 49 girls) and negroes (39 boys, 42 girls), all 6 yrs.-7 yrs. 5 mos. old, took a simple eye-hand coordination test. Comparisons

of total groups and of single sex groups showed the whites always faster, but no differences approached statistical significance.—*D. K. Spelt* (Mary Baldwin).

1090. **Park, R. E.** *Morale and the news.* *Amer. J. Sociol.*, 1941, 47, 360-377.—The object of psychic warfare is to destroy morale, particularly of the civilian population. When successful, it has paralyzed the national will, making collective action impossible. Recent events in Europe illustrate methods of creating and destroying national solidarity. Propaganda is the weapon with which civilian morale is destroyed or created. With the more extensive use of the arts and devices of psychic warfare war has assumed the character of a dialectic process, in which it appears not as a struggle of physical forces merely but of ideas and ideologies. News makes public opinion; but public opinion is sometimes inimical to morale, when it tends to intensify and magnify differences of attitude and opinion. But discussion, upon which public opinion is based, in so far as it brings into the open sentiments and attitudes that would otherwise be suppressed, tends to bring about understanding and unity and by so doing improves morale. War and conflict may be said to function when they bring about an understanding upon which a secure peace may be based.—*D. L. Glick* (Brown).

1091. **Roberts, J. A. F.** *The negative association between intelligence and fertility.* *Hum. Biol.*, 1941, 13, 410-412.—This note is in criticism of the methods, reasoning, and arithmetic published in a paper by Willoughby and Coogan (see XIV:4198).—*N. R. Bartlett* (Brown).

1092. **Robinson, E. S.** *Changes in some common "superstitions" of college students over a two-day interval.* *Proc. Okla. Acad. Sci.*, 1941, 21, 127.—Abstract.

1093. **Rohrbaugh, L. H.** *Measuring group behavior dynamically.* *J. educ. Sociol.*, 1941, 15, 3-16.—Various approaches which have been applied to the problem of measuring group behavior fall short of attainment in so far as static instruments are employed in attempting to observe and measure dynamic situations. A method is proposed which, "if not entirely dynamic in nature, is at least much less static than presently available devices." Stages in the development of a theoretical town, Walkton, are described and translated into the concepts and representations of field theory. Diagrams of Walkton are presented showing (1) relative lack of conflict as Walkton is the center of an agricultural area, (2) a developing conflict situation as Walkton becomes industrialized, (3) Walkton as a true conflict situation, (4) lessening of conflict as Walkton becomes better adjusted. It is concluded that "psychological field theory appears to represent a definite step forward toward the setting-up of a verifiable mathematical methodology that will keep pace with and reflect, and thus enable measurement of, group behavior."—*D. G. Ryans* (Cooperative Test Service).

1094. **Saenger, G.** *Today's refugees, tomorrow's citizens; a story of Americanization.* New York: Harper, 1941. Pp. xvi + 286. \$3.00.—(*Educ. Abstr.* VI: 1295).

1095. **Schneirla, T. C.** *Social organization in insects, as related to individual function.* *Psychol. Rev.*, 1941, 48, 465-486.—The pattern of group behavior exhibited at any given time by individuals in the army-ant swarm is the product of conditions both intrinsic and extrinsic in nature. Limited and stereotyped characteristics of the individual may, in the group situation, cumulatively produce a complexly organized and highly adaptive total function. Thus leadership is a generalized property of the aggregation, since individuals change their roles momentarily, according to their placement in the general situation. An early socialization process occurs in the individual, enlarging its social space, through learning, so that it acquires dependence on a particular group. The larval brood, through its activity, furnishes a social stimulation which increases the level of general colony excitement, and enlarges the social space. Illustrations from foraging, nest-patterning, the swarm raid, etc. indicate that the analysis of insect level behavior leads to concepts which are quite compatible with the field approach which Lewin has developed for the human level.—*A. G. Bills* (Cincinnati).

1096. **Shils, E. A.** *A note on governmental research on attitudes and morale.* *Amer. J. Sociol.*, 1941, 47, 472-480.—The government of the United States is now conducting investigations into attitudes on a large scale. These investigations include studies of special publics, analyses of press contents, radio-listening studies, and studies of foreign broadcasts. The British government is carrying on somewhat similar studies on a more limited scale.—*D. L. Glick* (Brown).

1097. **Shuttleworth, F. K.** *Sampling errors involved in incomplete returns to mail questionnaires.* *J. appl. Psychol.*, 1941, 25, 588-591.—Significant differences were found between the early and late responses to a mail questionnaire.—*E. E. Ghiselli* (California).

1098. **Sisson, B. M.** *Social change and public opinion.* *Sociol. soc. Res.*, 1941, 26, 121-125.—Individuals' private opinions are likely to be more liberal than their public opinions. Majorities of 70-80% of the nation favor some stand quite different from the status quo in reference toward marriage, divorce, control of venereal disease, etc. Until individuals are ready to express opinions publicly as well as privately, there will continue to be a discrepancy between liberal positions and political realities.—*O. P. Lester* (Buffalo).

1099. **Stagner, R.** *A comparison of the Gallup and Fortune polls regarding American intervention policy.* *Sociometry*, 1941, 4, 239-258.—All Gallup and Fortune questions on U. S. policy toward the European war were studied, with results, for 1939, 1940, and part of 1941. They were classified, according to Blankenship's work, as positive or negative;

as objective or subjective; as using check-lists or not; and as pro- or anti-interventionist with regard to phrasing and use of prestige-bearing names. The data suggest that (without intent to distort) the Gallup survey "gives some advantage to the interventionist position in forming questions" although both polls err in this direction. This is held to have aided in the public "step-by-step endorsement of aggressive policies." The biased question forms are most effective when opinions are vague, and this is said to have been the state of American opinion in 1939. Suggestions for future polls are offered. An appendix lists all the poll questions studied.—*L. J. Stone (Vassar).*

1100. Sullivan, H. S. **Psychiatric aspects of morale.** *Amer. J. Sociol.*, 1941, 47, 277-301.—Psychiatric consideration of morale begins with study of demoralized people. Beyond demoralization is the relatively momentary state of panic. Acute demoralization grades through blank terror, fear and escape, psycho-neurotic disablements, and "getting rattled" to rage and anger. Chronic demoralization grades from discouragement to despair. Circumstances of demoralization include both interpersonal and biological factors. Essential elements of modern warfare are psychiatric strategy and tactics, offensive and defensive, for impairing enemy and protecting home morale. Principles of the former include destruction of faith in the meaning of life, disorganization of governmental control, disintegration of communities making up the enemy power, and direct demoralization of its citizens. A few principles of a positive strategy are: dissemination of understanding of the social structure necessary in the nation at defensive war, synthesis of solidarity, control of disintegrative people, realistic distribution of roles, and hygienic management of activity. Favorable efforts already visible are: rational selection of personnel; development of a Morale Activities Branch; and the possibility that the Office of Civilian Defense will bring about a more adequate understanding of the person in the national integration.—*D. L. Glick (Brown).*

1101. Sumner, F. C., & Lee, J. A. **Some resemblances between friends of like sex and between friends of unlike sex among a group of Negro college students.** *J. Psychol.*, 1941, 12, 199-201.—15 pairs of friends of the male intrasexual group, 15 of the female intrasexual group, and 25 of the intersexual group were measured as to resemblance in chronological age, mental ability, socio-economic status, interest-attitude, 6 personality traits, and skin color. The rho-correlations with probable errors are presented for the data. Most of the correlations are positive but low. The 5 significant correlations appear to show that "the male Negro college student chooses a male Negro college friend who resembles himself fairly regularly in interest-attitude and in skin color. The male-female Negro college couples resemble fairly regularly in socio-economic status, skin color, and chronological age."—*F. A. Mote, Jr. (Connecticut).*

1102. Taylor, E. M. **A study in the prognosis of musical talent.** *J. exp. Educ.*, 1941, 10, 1-28.—The testing program described in this paper was conducted at the College of Music of Cincinnati from 1930 to 1935, and employed the Seashore tests, the K-D music tests, the Kwalwasser tests, the Measures of Musical Background (an original test devised for experimental purposes), and the Detroit Advanced Intelligence Test, Froms V and W. As a whole, these batteries do not evidence sufficient predictive power to be used by themselves for guidance purposes, yet neither do they have so little value as to warrant discarding them entirely. 3 tests were found outstanding: Background Discrimination of Mode, K-D Pitch Imagery, and K-D Tonal Memory. Particularly the first evidenced high predictive power for college and professional success; more experimental tests involving such perceptual capacities as this test measures might well be developed.—*H. W. Karn (Pittsburgh).*

1103. Ulio, J. A. **Military morale.** *Amer. J. Sociol.*, 1941, 47, 321-330.—Military and civilian morale react upon one another, and both are based on fidelity to a cause, but there is a certain kind of morale that is distinctly military. It begins with the soldier's attitude toward duty and develops with the soldier's command over himself. It is a spirit that becomes dominant in the individual and also in the group. Physical comforts or hardships may be factors but are seldom determining in the making or unmaking of morale. A cause known and believed in; knowledge that substantial justice governs discipline; the individual's confidence and pride in himself, his comrades, his leaders; the unit's pride in its own will; these basic things, supplemented by intelligent welfare and recreation measures and brought to life by a spirit of mutual respect and co-operation, combine to weld a seasoned fighting force capable of defending the nation.—*D. L. Glick (Brown).*

1104. Wanger, W. **The role of movies in morale.** *Amer. J. Sociol.*, 1941, 47, 378-383.—While the primary work of the movies in building national morale has been to provide recreation and entertainment for the public, the men who make the movies are ready to produce both clarifying and inspiring films. In order for such films to be produced, it is necessary for our leaders to clarify the concepts associated with the democratic way of life.—*D. L. Glick (Brown).*

1105. Weitzman, E. **Note on a test of social competence.** *J. appl. Psychol.*, 1941, 25, 595-596.—Announcement of a 33-question social competence inventory standardized on 899 persons between the ages of 16 and 24 years.—*E. E. Ghiselli (California).*

1106. Wiley, L. N. **A résumé of major experiments in abstract design ending with the year 1941.** *Psychol. Bull.*, 1941, 38, 976-990.—"The past 10 years have witnessed a quickening of interest in the psychology of aesthetics. . . . This is particularly true of visual aesthetics, wherein the shape of an object has assumed commercial value." This re-

view is divided into the following sections: classical experimentation, the Iowa explorations, the background of the neurological conception, the search for aesthetic factors, implications of the factor controversy, mathematical biophysics, and general agreements. It covers 26 publications most of which are of recent date.—*F. Mc Kinney* (Missouri).

1107. **Wirth, L.** *Morale and minority groups.* *Amer. J. Sociol.*, 1941, 47, 415-433.—Diverse racial and cultural elements in the United States complicate the problem of building national morale. The disadvantaged position of our minorities lends itself to exploitation by foreign governments. Some remedial and precautionary measures are ill-advised. Our strategy of morale-building might well capitalize on the diverse origin of our people and our democratic traditions. Emphasis should be placed on our common aspirations rather than our common memories. If our minorities can be convinced that their minority status is not permanent and that they can hope to share fully in the promises of democracy, their effort in the national enterprise can be relied upon.—*D. L. Glick* (Brown).

1108. **Znaniecki, F.** *The changing cultural ideals of the family.* *Marriage & Family Living*, 1941, 3, 58-62; 68.—The personal relations within the family which have supplanted the kinship order which existed when perpetual or grandparental families were strong and vital are "by no means unregulated socially. They follow definite patterns which have existed for centuries, though they are only now being fully applied to the family and are undergoing some changes in the process." The author considers the relations between husband and wife and those between parents and children and concludes that "the new family ideals, precisely because they leave so much more personal freedom than the old patterns, are more exacting. They demand of partners in family relations a much higher degree of personal culture, not only ethical but intellectual and aesthetic. However, this does not prevent them from spreading in American society. The history of culture conclusively shows that after an ideal has once been accepted by a social group, the greater is its demands upon individual members, the deeper and wider its influence."—*L. M. McCabe* (Cambridge, Mass.).

[See also abstracts 837, 849, 898, 921, 949, 953, 1022, 1152, 1169, 1201, 1251, 1255, 1258, 1266, 1272, 1277.]

CRIME AND DELINQUENCY

1109. **Ahnsjö, S.** *Delinquency in girls and its prognosis.* *Acta paediat., Stockh.*, 1941, 28, Suppl. III. Pp. 335.—This is an analysis of the records of 2448 delinquent girls from all detention homes in Sweden, 1903-1937. The delinquency rate was found to rise with density of population, illegitimate birth, and poor home conditions. Prognosis for sexual offenders is better than for offenders against property, redetention rates being, respectively, 16%

and 22.5%. Risk of punishment after discharge is 7% for the first 5 years, then falls steadily, and reaches 1.5% by the third 5-year period. Legitimate children have less satisfactory prognosis than illegitimates in the property-crime group; psychopaths have less favorable prognosis than those of low IQ; and cases of early detention are less favorable than those of late detention. The number later marrying slightly exceeds general population percentages.—*E. S. Primoff* (U. S. Employment Service).

1110. **Bromberg, W.** *What can the psychiatrist do for the criminal offender?* *Fed. Probation*, 1941, 5, 15-19.—[Abstracted review; original not seen.] The article is specifically concerned with offenders who are neither insane nor mentally defective but who are amenable to socio-psychologic therapy in which psychiatrist and social worker can cooperate. A distinction is made between intuitive therapy which includes well-wishing, counsel, and the sympathetic touch, and rational therapy which is effected by an emotional relationship between patient and therapist, the latter assuming the role of a loving but restricting parent. Rational therapy is hindered by the vindictiveness still present in our legal code, by identification of the therapist with the punishing agents, and by antagonism on the part of police officials. In the way of treatment the psychiatrist can offer consolation, promise to help the offender, bring the patient to see that his crime was due to a neurotic conflict, assuage the guilt associated with the crime, and demonstrate the possibilities of handling his conflict in acceptable social form. In conclusion the author speaks briefly about the technique of group therapy.—*A. Chapanis* (Yale).

1111. **Brown, J. F., & Orr, D. W.** *The field-theoretical approach to criminology.* *J. crim. Psychopath.*, 1941, 3, 236-252.—Considerable debate exists in the literature between adherents of the sociological and psycho-biological approaches to the problems of crime. The authors insist that this is a meaningless antithesis arising from the class-theoretical approach of 19th century biological and social science. They argue "that the only way in which the problems of criminal behavior may be adequately discussed is in terms of a 'field theory' in which biological, psychological and cultural factors all play integral parts." The field-theoretical approach does not deny, however, that in some criminals one of these factors may have etiological predominance. In a brief historical section recent theoretical positions in criminology are considered. This is followed by an etiological classification of criminals which exemplifies the method of the field-theory. 4 illustrative case studies are included.—*A. Chapanis* (Yale).

1112. **Goitein, P. L.** *Aggressive stealing.* *J. crim. Psychopath.*, 1941, 3, 200-212.—The author discusses in great detail the case history of a boy accused of stealing a large amount of money from his employer. This was the first offense on his first job, and the only motive offered was boredom and the desire to escape from home. Analysis

revealed "a repetition compulsion mechanism in an anal erotic of obsessional character with paranoid undercurrents."—*A. Chapanis* (Yale).

1113. Gray, M. G., & Moore, M. The incidence and significance of alcoholism in the history of criminals. *J. crim. Psychopath.*, 1941, 3, 289-325.—The authors present considerable statistical data on 2565 persons who were under the care of the Massachusetts Department of Correction between 1936 and 1939. These data are oriented toward the problem of discovering relationships between alcoholism or non-alcoholism in criminals and such factors as race, nativity, religion, sex, age, marital status, education, intelligence, etc. The most important factor seemed to be that of the personal and familial background of the criminal; but the data in general do not indicate that the alcoholic and abstaining criminal, male or female, differ very greatly.—*A. Chapanis* (Yale).

1114. Gutheil, E. The criminal complex in compulsion neuroses. *J. crim. Psychopath.*, 1941, 3, 253-271.—"Universally, mankind entertains criminal impulses which it is constantly obliged to keep in check because of the demands of culture." Among neurotics the compulsion neurosis affords the patient various means of safeguarding himself against his criminal impulses. The major part of this paper is a presentation of 20 short case histories to indicate the variety of criminal impulses represented and the means by which the symptoms of the compulsion neurotic preserve the moral integrity of the patient. These symptoms may execute the anti-social act symbolically by displacement, caricature a contemplated act, or repeat symbolically an act the patient had once committed and add to it a correcting element as a concession to his superego. "It is characteristic of all these patients that they cannot forget their past and that in their neurosis, crime, guilt and atonement fuse to a symbolic entity."—*A. Chapanis* (Yale).

1115. Karr, M. L. A study of adolescents who kill. *Smith Coll. Stud. soc. Work*, 1941, 12, 199-200.—Abstract.

1116. Littmann, J. Psychiatrisch-neurologische Begutachtungen im Felde. (Neuropsychiatric certifications in the field.) *Schweiz. Arch. Neurol. Psychiat.*, 1941, 46, 215-260.—Littmann describes the provision for psychiatric consultation on disciplinary cases in the Swiss army, and their disposition. His 35 personal cases, which revolved chiefly around the question of responsibility, show the essential similarity, biological and psychological, of military and civilian delinquents. 28.5% of his cases were alcoholics. All had the habit before induction, and it was unaffected by military life. Half had to be discharged; none were suitable for rehabilitating institutions. 25.7% were psychopaths, all of whom were recommended for discharge. In modern armies, psychopathy is manifested chiefly in asocial or antisocial tendencies. 11.2% were neurotics. This group contains valuable military elements, accessible to the abbreviated psycho-

therapy possible in the army. Mild mental defectives comprised 5.7%. They may be useful soldiers (some even becoming officers), but as they are liable to give out suddenly, they should be discharged. 14% were essentially normal mentally, although peculiar.—*M. E. Morse* (Baltimore, Md.).

1117. Pollack, O. The criminality of old age. *J. crim. Psychopath.*, 1941, 3, 213-235.—Scientists have generally paid scant attention to the problems of the aged criminal. Psychiatrically old age is characterized by "slower reactions, slower differentiation and selection, stubbornness, fatigability, deterioration of memory, dullness as to higher feelings, weakening of phantasy, narrowing of emotions, and egotism." Conditions emphasized as typical of old age are arteriosclerosis, senile dementia, and senile deterioration without traceable organic cause. Criminal statistics from the United States and certain foreign countries indicate that there is a general decline of the crime rate with advancing years, but that there is a high incidence of first offenders in the higher age brackets and a greater relative frequency of certain types of crime, notably sex crimes, violations of the narcotic and drug laws, and embezzlement. Illustrative crimes are reported to show the characteristic pattern of the offenses committed by the aged criminal. Although actual legal regulations are few, numerous suggestions have been made in this respect. In the opinion of the author, however, available material does not yet permit final recommendations.—*A. Chapanis* (Yale).

1118. Sauerlandt, —, & Seelig, —. [The state of criminologic and especially of the criminobiologic education in German universities and the possibilities of its reform.] *M Schr. KrimBiol.*, 1941, 32, 53 ff.—[Abstracted review; original not seen.] The article is a combined report by Sauerlandt on lectures and semester hours in criminology offered by various German universities and by Seelig on the same material for Austrian universities. In general criminal science and criminal biology are less developed than the fields of forensic medicine and forensic psychology. Since the advent of Hitler's regime, emphasis on heredity and race has tended to impede progress in the scientific study of crime and has resulted in Austria's forging ahead of Germany in this field. A recommendation is made that some of the judiciary be compelled to take scientific courses, a procedure not in effect at the present time.—*A. Chapanis* (Yale).

1119. Shalloo, J. P. [Ed.] Crime in the United States: an attempt to understand the basic patterns of causation underlying criminal conduct. *Ann. Amer. Acad. polit. soc. Sci.*, 1941, 217. Pp. 237.—This is a review of fields of research related to crime causation. The contributors and their topics are the following: J. Hall, crime as social reality; B. Smith, enforcement of the criminal law; R. H. Beattie, the sources of criminal statistics; J. Cohen, the geography of crime; G. B. Vold, crime in city and country areas; M. F. Ashley-Montagu, the biologist looks at crime; L. N. Yepsen, the psychol-

ogist looks at crime; W. Healy, the psychiatrist looks at delinquency and crime; W. C. Reckless, the sociologist looks at crime; E. H. Stofflet, the European immigrant and his children; G. B. Johnson, the Negro and crime; M. Ploscowe, crime in a competitive society; E. H. Sutherland, crime and business; A. R. Lindesmith, organized crime; H. Mannheim, crime in wartime England; A. Morris, criminals' views on crime causation; E. D. Monachesi, official agencies and crime prevention; and N. Cantor, organized efforts in crime prevention.—*L. J. Stone (Vassar)*.

1120. Walker, E. L. The Terman-Miles "M-F" test and the prison classification program. *J. genet. Psychol.*, 1941, 59, 27-40.—The Terman-Miles "M-F" test was administered to approximately 250 male inmates of the Indiana State Prison. The results indicated that the test is unsatisfactory for routine prison use at present because: (1) it involves too long a testing period; (2) the scoring procedure is too ponderous; (3) prisoners with MA's of 12.4 and under (on the Morgan mental test) are unable to complete the test adequately; (4) known homosexuals, both active and passive, make such widely scattered scores that no classification is possible on the basis of test performance. Robbers made the most masculine scores, murderers the most feminine, and consistent violators of prison regulations made more masculine scores than conformists.—*D. K. Spelt (Mary Baldwin)*.

1121. Weir, E. Criminology: a scientific study of the modern crime problem. Joliet, Ill.: Institute for the Scientific Study of Crime, 1941. Pp. xx + 329. \$3.00.—This book is written from the standpoint of the author's 16 years' experience as Catholic chaplain in the Illinois penitentiaries. The fundamental causes of crime are 2: lack of religious instruction and lack of training to self-control. Contributory causes are manifold and include lack of a wholesome home and proper parental guidance, lack of scholastic training, living in delinquency areas, physical handicaps, and mental diseases. Considerable attention is directed toward the legal aspects of crime, and the evils of our present legal procedures are indicated. The various personality types into which criminals may be classified are presented, and the problems of the disposition of prisoners, the determinate vs. indeterminate sentence, death penalty, and parole system, are discussed in detail. Throughout the book emphasis is placed on the evidences found in the whole police, legal, and penal system of widespread corruption by political groups or private individuals seeking personal gain. The author's program for the diminution of crime is centered about widespread education along the lines of the religious program laid down by Pope Pius the XIth. Certain specific legislation is also suggested.—*A. Chapanis (Yale)*.

1122. Wilmanns, K. Über Morde im Prodromalstadium der Schizophrenie. (Murder in the early stages of schizophrenia.) *Z. ges. Neurol. u. Psychiat.*,

1940, 170, 583-662.—[Abstracted review; original not seen.] The author studied 18 cases of murder committed by young men in the early stages of their disease. Although they had been showing personality changes for a long time, they were never institutionalized or evidently psychotic. All kept going for longer or shorter periods with a definite compulsion to kill. If they had been studied psychiatrically, the murders might have been prevented. Motives for the crimes were varied, many reported an irresistible impulse, some an intolerable inner tension, and others that they were forced by some external force, e.g. God or the devil. These murderers usually make no effort to cover up their crime, and they often attempt suicide afterwards. The author also mentions a few famous assassins whom he regards as having been schizophrenic.—*A. Chapanis (Yale)*.

[See also abstract 1009.]

INDUSTRIAL AND PERSONNEL PROBLEMS

1123. [Anon.] Mobilization of mental power. *Nature, Lond.*, 1941, 148, 417-419.—This is a plea that the British utilize more fully the aid of psychology. It is held that, for instance, emotional tests might be profitably applied to officer selection, to pilot selection, and so on. Furthermore, "the allocation of new labour in industry, the human element in production, propaganda, morale and evacuation are some of the problems the solution of which would be facilitated were the aid of psychology more fully enlisted."—*N. R. Bartlett (Brown)*.

1124. Blain, D. The automobile accident—a medical problem. *J. crim. Psychopath.*, 1941, 3, 272-277.—The author reviews recent work, notably by the Recorder's Court in Detroit, on the problem of automobile accidents. Among traffic offenders the feeble-minded, alcoholic, and mentally diseased are represented in disproportionately large numbers. About 4% of accident-prone drivers account for roughly one-third of all accidents, but there is still the important problem of the normal one-accident driver, because there are so many of him. Pedestrians account for 44% of deaths in automobile accidents. The article ends with suggestions for further study of driver and pedestrian problems and of psychologically sound safety programs and legislation.—*A. Chapanis (Yale)*.

1125. Brintnall, A. K. A study of some driving habits of commercial drivers. *J. soc. Psychol.*, 1941, 14, 159-164.—20 commercial drivers were tested to determine the validity of the suggestion of Shriver that a "discrimination can be made between accident-prone and non-accident-prone drivers on the basis of the frequency with which they use excessive acceleration and deceleration." Acceleration and deceleration scores were recorded from devices secretly installed in the trucks of the drivers and compared with accident frequency as shown by 5-year records of the drivers. "The relationship between this behavior and accident frequency can-

not be definitely determined from the data at hand. There is some indication, however, that a positive relationship may exist." The frequency of use of excessive acceleration and deceleration was quite constant for the subjects tested.—*G. Brighthouse* (Occidental).

1126. **Clarke, T. A.** Acuity of hearing in searchlight and other personnel requiring good hearing. *J. R. Army med. Cps*, 1941, 77, 135-139.—With the W. E. 6A audiometer, 100 soldiers trained as listeners or spotters were tested. Hearing loss was over 27 dbls. for 5% of the ears; 17.5-27dbls. for 12%; 10.5-17.5 for 7%; and 3-10.5 for 22.5%. Only 40% of the subjects appeared to have, for both ears, hearing superior to 3 dbls. loss. Since the audiometer is unsuited for mass testing, it is suggested that gramophone records with words of varying intensities be employed.—*E. S. Primoff* (U. S. Employment Service).

1127. **Dilger, J.** Beiträge zur psychotechnischen Methodenlehre der Eignungsprüfung, Anlernung und arbeitstechnischen Bestgestaltung bei der deutschen Reichsbahn. (Contributions to the psychotechnical methodology of the aptitude examination, job training, and work-technological improvement in the German Reich railroads.) Berlin: Dissertation, 1939. Pp. 47.

1128. **D'Oliviera Esteves, J. V.** [Use of tests of stereoscopic vision and of the idea of distance in estimating the progress in training pupils in aviation.] *Rev. méd. lat.-amer.*, 1939, 25, 34-41.—[Abstracted review; original not seen.] An apparatus is described by which the idea of estimating distance can be tested. These tests are designed to show that individuals with initial defects of stereoscopic vision and in calculation of direction and distance may nevertheless become good pilots if these defects are correctable after a course of instruction.—*C. Pfaffmann* (Brown).

1129. **Drake, C. A.** Job tests. *Person. J.*, 1941, 20, 184-189.—Tests built upon time and motion studies have been found successful in selection for specific jobs. Men with better motor test than perception test performance were found to be accident-prone. Inspection was found to be a highly specialized process needing special tests. Applicants scoring too low on intelligence tests made unsatisfactory operators, those scoring too high, soon quit. Industrial engineers were used to design, construct, and interpret the performance tests, after they had been taught the necessary statistical techniques.—*M. B. Mitchell* (Minnesota).

1130. **Drury, L. B.** Selecting employees for advancement. *Person. J.*, 1941, 20, 166-171.—At the C and H Sugar Refining Corporation seniority and foremen's ratings are used as the basis for promoting men on lower bracket jobs. In selecting foremen, clerical and stenographic employees, and men for transfer to mechanical crafts and the technical department intelligence and aptitude tests have recently been used successfully. Retests of men out of school for some time and working on

routine jobs showed higher results than the first tests. For this reason an arithmetic test is now given as a buffer before the aptitude and intelligence tests. Only a minority opposes the tests; many, including foremen, request the privilege of taking them. Most employees feel that their applications for promotion are given just consideration.—*M. B. Mitchell* (Minnesota).

1131. **Ewart, E., Seashore, S. E., & Tiffin, J.** A factor analysis of an industrial merit rating scale. *J. appl. Psychol.*, 1941, 25, 481-486.—In industry, the use of a rating procedure which includes scales for several traits assumes that the rating method separately indicates the standing of employees on each of the traits. A factor analysis of a typical industrial merit scale indicating that 2 factors were sufficient to account for most of the variability of the ratings, suggests that multiple item rating scales actually reveal very few different aspects of employees' success on the job.—*E. E. Ghiselli* (California).

1132. **Fay, P. J., & Middleton, W. C.** Indirect measurement of listeners' preferences for men and women commercial announcers. *J. appl. Psychol.*, 1941, 25, 558-572.—"Men are preferred [as announcers] for advertising any of the products commonly advertised by radio, irrespective of the sex of the consumers to whom the products appeal."—*E. E. Ghiselli* (California).

1133. **Ferguson, H. H., & Geddes, W. R.** Accidentes de automóvil en las carreteras. La confianza peligrosa del peaton. (Automobile highway accidents. The dangerous confidence of the pedestrian.) *Psicotecnia*, 1941, 2, 199-206.—29 student subjects estimated by distance when walking toward or away from the headlights of a stationary automobile the degree of their own visibility to 3 observers in the vehicle. The tendency to overestimate their probable visibility was marked. Several judgments of certainty of being seen were made at distances entirely beyond the range of visibility (more than 463 feet). Under actual driving conditions with traffic and confused lighting the error would be worse, as some supplementary tests indicated.—*H. D. Spoerl* (American International College).

1134. **Hammond, J.** College trained policewomen. *Publ. Person. Quart.*, N. Y. C., 1941, 2, 153-161.—This initial study of the relationships between college grades, intelligence test scores, college majors, employed experience, and extra-curricular activities and the score received on the policewoman test proved that there is a definite relationship between score on the civil service test and college grades and a standardized intelligence test. Classics majors had the highest median test score on the policewoman test and the highest percentage of appointments. Mathematics majors were next. Music and education majors had the lowest median test scores. The policewoman test selected those who had employed experience and who possessed high personality qualifications.—*H. Hausheer* (Lamoni, Iowa).

1135. Humes, J. F. The effects of occupational music on scrapage in the manufacturing of radio tubes. *J. appl. Psychol.*, 1941, 25, 573-587.—The scrapage of 88 female radio-tube assemblers was found to be reduced by the playing of recorded music. When all of the music was either fast or slow, the most beneficial results were obtained.—E. E. Ghiselli (California).

1136. Koran, S. W. Performance testing in public personnel selection. (Part II). *Educ. psychol. Measmt.*, 1941, 1, 365-386.—A description with sample forms of tests for graphotype-addressograph operators, tabulating machine operators, and duplicating machine operators. (See also XV: 5327.)—P. S. de Q. Cabot (Simmons).

1137. McNamara, J. J., & Tiffin, J. The distracting effect of nearby cartoons on the attention holding power of advertisements. *J. appl. Psychol.*, 1941, 25, 524-527.—50% more time was spent in looking at magazine advertisements when no cartoon was nearby as compared with conditions of competing cartoons.—E. E. Ghiselli (California).

1138. Raphael, W. Uso y abuso de los "tests" de selección. (The use and abuse of tests for selection.) *Psicotecnia*, 1941, 2, 195-198.—This is a translation of a paper from *Industrial Welfare and Personnel Management*, London. The problem of selecting personnel has changed in wartime from that of rejecting the unqualified to that of choosing the better qualified among persons available. This shift affects the use of the appropriate tests. The original problem of determining a suitable combination of qualifications continues. Tests should never be used as the primary means of selection, but are best employed in supplementing interviews.—H. D. Spoerl (American International College).

1139. Rigg, M. G. An attempt to measure the effectiveness of white space in an advertisement on the basis of actual sales. *Proc. Okla. Acad. Sci.*, 1940, 20, 145-146.—Abstract.

1140. Rodrigues, J. F. [Job analysis for railroad engineers on the Portuguese railroads.] *Gaz. Caminh. Ferr. Lisboa*, 1940, July.—[Abstracted review; original not seen.] Some 15 physical and psychophysiological specifications are listed as requirements for the engineer's work, including knowledge of details of the labor and promotion system. Minimum ratings in a large number of psychological particulars are given, using a scale worked out at the National Psychotechnical Institute of Madrid.—H. D. Spoerl (American International College).

1141. Sampter, H. C. Motion study. New York: Pitman, 1941. Pp. xi + 152. \$1.75.—The basic principles and methods of motion study are defined in the form of sequential steps, from over-all motion study to micromotion studies of small operations. The 19 therbligs of the Gilbreths are defined and extended, and to the 20 original laws of the Gilbreths are added 12 supplementary principles of motion study suggested by R. M. Barnes, and 5 laws collected by the Production Control Machines Corporation. The 37 'principles' are clarified and

in some cases extended. The applications of motion study to safety, fatigue, cleanliness, and order are suggested. 47 illustrations help clarify the descriptions.—H. Moore (Business Research Corporation).

1142. Solomon, R. S. Do your tests pick good workers? *Person. J.*, 1941, 20, 177-183.—The following fundamentals of selection testing are presented. (1) Prediction of success or failure underlies all aptitude testing. (2) Tests should be restandardized for any particular situation. (3) Batteries of tests predict better than single tests. (4) The pattern of the test scores must be considered for better prediction and improvement of the individual. (5) Statistical data should be re-interpreted into meaningful language. (6) Validity and reliability of a test should be established on basis of actual performance on the job. (7) Negative or exceptional cases are important for study of the predictive value of tests. (8) Extreme test results usually give more certain predictions than average results. (9) Long-term prediction is usually more successful than short-term prediction.—M. B. Mitchell (Minnesota).

1143. Tovo, S. Le cause degli infortuni; contributo sperimentale allo studio dell'influenza della fatica. (The causes of accidents; experimental contribution to the study of the influence of fatigue.) *Rass. Med. industr.*, 1941, Nos. 6 & 7.—[Abstracted review; original not seen.] Degrees of fatigue were measured by Donaggio's reaction in 107 industrial accident cases; extreme fatigue was present in 14%. There is a bibliography of 165 items.—H. D. Spoerl (American International College).

1144. Travers, L. B. Improving practical tests. *Person. J.*, 1941, 20, 129-133.—Observation of personal characteristics during practical tests rather than during an interview is recommended because the subjects show greater freedom during the former. Practical tests can be improved by having some observers observe skill while others observe personal characteristics.—M. B. Mitchell (Minnesota).

[See also abstracts 882, 923, 952, 962, 968, 999, 1013, 1103, 1116.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

1145. Abbott, T. G., & Gardner, G. E. A consolidated rural school mental health project. *Amer. J. Orthopsychiat.*, 1941, 11, 718-725.—This describes an attempt to extend at minimum cost some mental health services to a consolidated rural school area in Massachusetts. The plan called for a series of lectures for the teachers on mental hygiene and classroom therapy. In addition, through lectures and discussion, the teachers were given a broader conception of the nature of personality development and factors in their own personalities which might be obstacles in their own lives and their functioning as teachers. The purposes of the project were to acquaint the teachers with the principles of mental

health, to enable them to select through case history methods children who need different kinds of help, to emphasize the use of community resources, and to acquaint parents with some of these problems of child guidance.—*R. E. Perl* (Jewish Board of Guardians).

1146. **Albert, H. R.** An analysis of teacher rating by pupils in San Antonio, Texas. *Educ. Adm. Supervis.*, 1941, 27, 267-274.—The author presents data on teacher rating by pupils from which he concludes that such rating may be valuable and reliable.—(Courtesy *J. educ. Res.*).

1147. **Andrus, L.** A composition test for foreign languages. *Educ. psychol. Measmt.*, 1941, 1, 355-364.—A description of a type of French composition test which has been developed at the University of Chicago.—*P. S. de Q. Cabot* (Simmons).

1148. **Baranyai, E. I.** Relation of comprehension to technique in reading. *J. genet. Psychol.*, 1941, 59, 3-26.—238 pupils of both sexes, 10-14 years old, read 3 passages of increasingly difficult material; the last section was in Latin and hence meaningless to the S's. Analysis of the data in terms of reading rate and accuracy yielded an arbitrary accomplishment index. The results indicated that increased comprehension is of greater significance than the development of mechanics in the improvement of reading rate and accuracy. The data are interpreted in connection with a theory of the nature of the reading process.—*D. K. Spelt* (Mary Baldwin).

1149. **Baxter, B.** Teacher-pupil relationships. New York: Macmillan, 1941. Pp. 166. \$1.25.—After determining by questionnaire "specifics of teacher-pupil interacting behavior which were recognizable by teachers," 42 teachers in 42 classrooms were visited and the specifics in evidence observed and tabulated by the experimenter, with the assistance of 3 other experienced teachers. Observations were continued in each of the classrooms for 5 or 6 months. Marked evidence was found that teacher behavior affects pupil behavior, notably in such categories as emotional maturity, self-direction, security, freedom from tension, social recognition and approval, courtesy, resourcefulness, etc. The book contains chapters on successful and unsuccessful teachers, desirable pupil behavior, an effective teacher, teachers in service, and teacher education and selection.—*L. A. Averill* (Worcester Teachers College).

1150. **Bear, R., & Odbert, H.** Insight of older pupils into their knowledge of word meanings. *Sch. Rev.*, 1941, 49, 754-760.—Freshmen college students given the Booker vocabulary test subsequently to having checked those words in lists and in connected reading material with whose meanings they were unfamiliar show faulty insight into the extent of their word knowledge. As a group they actually fail only 64% of the words indicated as unknown, while 44% of those supposedly familiar are missed on the test. Only 45% of the words failed on the vocabulary test are checked as unknown on the list, and 44%, in the case of the continuous passage.

The tendency to overestimate one's word knowledge is correlated with smaller vocabulary and lower psychological examination scores. To enhance insight into word knowledge the techniques employed in this inquiry, supplemented with training in vocabulary enlargement, are of value.—*R. C. Strassburger* (St. Joseph's College for Women).

1151. **Bellows, R. M.** Procedures for evaluating vocational criteria. *J. appl. Psychol.*, 1941, 25, 499-513.—Inasmuch as "efforts designed to evaluate predictive instruments have generally neglected the fact that basic criteria are fallible" the following items are discussed and are suggested as a check list for evaluating criteria: "contamination by illicit use of predictor information; contamination by artificial limitation of production; contamination by differential influence of experience; statistical reliability; correlation with other criteria; predictability; acceptability to the job analyst; acceptability to the sponsor of the study; production of a practical change in the situation by the use of the derived instrument."—*E. E. Ghiselli* (California).

1152. **Benítez Ramirez, A., & Dantín Gallego, J.** Aportación al estudio psico-físico y pedagógico de la población escolar de la Sierra de Guadarrama. (Contribution to the psycho-physiological and pedagogical study of the school population in the Guadarrama mountains.) *Psicotecnia*, 1941, 2, 182-194.—This developmental study of school girls from 6-14 correlates in various combinations the following measurements: physical development (vital index), mental development (Terman IQ), capillaroscopy (Jaensch classification), and school progress. The environment is culturally and economically underprivileged. The study illustrates developmental degeneration in relation to environmental limitations.—*H. D. Spoerl* (American International College).

1153. **Binion, H. S.** Do we know when a child is ready to read? *Proc. Okla. Acad. Sci.*, 1941, 21, 139.—Abstract.

1154. **Blair, G. M.** The vocabulary of educational psychology. *J. educ. Psychol.*, 1941, 32, 365-371.—Vocabulary analyses of 8 educational psychology texts published since 1937 were made by looking up every word on odd pages of each book in Thorndike's word lists and keeping a frequency count of those not found in the first 10,000 words, and by checking difficult words with Warren's *Dictionary of psychology* to single out those of psychological nature. Frequency of use varies greatly. Of the 15 most frequently used words in each text (key words) the word 'psychology' is the only one common to all. This divergence in concepts and terminology may be confusing to individuals trained in one place and hired in another. Writers of introductory psychologies for educational students are urged to standardize their vocabulary.—*J. W. Macmillan* (Maryland).

1155. **Blau, A., & Veo, L.** Mental hygiene in a special public school for maladjusted children. *Amer. J. Orthopsychiat.*, 1941, 11, 691-702.—This is the description of an experimental project. Case

material is presented to illustrate the central idea of a group approach in a school oriented along the special needs of problem children supplemented and guided by a child guidance clinic. The special school provides some of the advantages of a controlled situation without severing important family ties, and educational help for children who are too great a disturbance in the average school. The treatment often results in sufficient readjustment to enable the child to re-enter a general school.—*R. E. Perl* (Jewish Board of Guardians).

1156. **Bradford, L. P.** A study of certain factors affecting English usage. *J. educ. Res.*, 1941, 35, 109-118.—Measures of English usage in terms of recognition of errors in grammar in printed material were secured for 706 white and 148 Negro adults employed by the WPA as teachers on the Adult Education Program. Previous occupations were extremely varied, and previous education ranged from 6th grade to graduate school. The correlation between English usage and previous education was .40, but this was greatly reduced when previous occupation, years spent in that occupation, and age were held constant. Previous occupation (Brussel-Barr Occupational Scale) showed a higher correlation with English usage than did formal education. The Negroes obtained significantly lower scores in English usage than the whites which can be explained on the basis of the poor environmental conditions affecting the Negroes, especially in the South.—*M. Murphy* (Pennsylvania).

1157. **Broom, M. E.** An experimental study of methods for improving reading mechanics in upper elementary grades. *El Paso Schs Stand.*, 1940, 18, 23-29.—The author presents data indicating that the metronoscope is a useful mechanical aid.—(Courtesy *J. educ. Res.*).

1158. **Cline, D. A.** An analysis of data concerning freshman admitted to Wayne University. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1941. Pp. 149. \$1.86.—... The evidence obtained in this study indicates that birthplace of parents, occupation of father, education of father and mother, location of the high school from which the student was graduated, the student's choice of occupation and his health record had little if any value in predicting the student's success as a freshman either in the regular colleges of the University or in the School of General Studies.—(Courtesy *Microfilm Abstracts*).

1159. **Crowe, F. M.** An experimental study of the effect on high school sophomores of teaching English with emphasis on guidance. *J. exp. Educ.*, 1941, 10, 48-53.—A group of high school sophomores given an integrated guidance method of instruction manifested greater growth in attitudes, emotions, and opinions than did a control group receiving the conventional method of instruction. On objective tests the control group showed greater scholastic achievement than the experimental group. The latter showed a growing interest in the study of literature as manifested in their class discussions,

individual conferences with the teacher, comments on their free reading activities, and discussions on essay type examinations.—*H. W. Karn* (Pittsburgh).

1160. **Dickenson, H. F.** Sequel to patterning examination responses in lieu of sectioning. *Sch. & Soc.*, 1941, 54, 449-452.—See XII: 4336.—*M. Lee* (Chicago, Ill.).

1161. **Drake, C. A.** Why students cheat. *J. higher Educ.*, 1941, 12, 418-420.—126 sophomore and junior students in a woman's college in which the honor system was in use were given 12 weekly true-false examinations. These were collected and scored, but some were returned apparently unscored, and the scoring was done in class. Comparison of the students' scoring with the scores previously obtained showed that 30 cheated by altering answers during the scoring in class. Of these, none was in the highest quarter on the freshman intelligence test, 9 were in the second quarter, 6 in the third, and 15 in the fourth. Of those who cheated, none was an A student in the course, 4% of B students cheated, 23% of C students, 75% of D students, and 67% of F students. 16% of the non-fraternity and 36% of the fraternity students cheated. Cheating is interpreted as growing out of the competitive system under which college credits are awarded. "The final solution [of the problem of cheating] probably involves the change of student motives as its primary consideration, a result not obtainable without drastic changes in present methods."—*R. A. Brotemarkle* (Pennsylvania).

1162. **Ellison, M. L., & Edgerton, H. A.** The Thurstone Primary Mental Abilities Tests and college marks. *Educ. psychol. Measmt.*, 1941, 1, 399-406.—Correlations between college marks and each of the factors P, N, V, S, M, I, D, as revealed by Thurstone's Primary Mental Abilities Tests, indicate the usefulness of these instruments in a college academic counseling program.—*P. S. de Q. Cabot* (Simmons).

1163. **Epstein, L. J.** An analysis of teachers' judgments of problem-children. *J. genet. Psychol.*, 1941, 59, 101-107.—18 female and 3 male teachers selected a total of 95 pupils out of a high school population of 750 when given an opportunity to name problem cases. 4 children were named by 3 teachers, 15 by 2 teachers, 76 by 1 teacher each. Over two thirds were boys. Most of the unsatisfactory behavior was disruptive of class routine. Commonest problems with boys were inattention, irregular attendance, lack of interest in work, and laziness; with girls, lack of interest in work, selfishness, dull mentality, and sluggishness.—*D. K. Spelt* (Mary Baldwin).

1164. **Fahey, G. L., & Corey, S. M.** Inferring level of mental activity from pupils' classroom questions. *J. educ. Res.*, 1941, 35, 193-200.—All questions asked by 169 pupils in 6 high school classes were recorded for a period of one academic year. 6 experienced teachers made separate judgments of the level of mental activity implied by each question. The median coefficient of correlation between

estimates of judges was .54. The mean level of estimated complexity of mental activity of all questions asked by each individual pupil was computed. Individual differences in complexity could be distinguished and were symmetrically distributed, but such individual differences were only slightly, if at all, related to differences in intelligence, age, school achievement, interests, reading abilities and appreciation, and accuracy and consistency in thinking.—*M. Murphy* (Pennsylvania).

1165. Fisher, M. B. A comparison of the performance of freshmen and sophomores in a beginning course in psychology. *J. exp. Educ.*, 1941, 10, 29-32.—Performances of groups of freshmen and sophomores matched on college curriculum, sex, age at college entrance, and scholastic aptitude test rank were compared in a beginning course in psychology. The differences between the 2 groups were not statistically significant and decreased during the semester. Correlation between scholastic aptitude and performance is higher for sophomores than freshmen and increases during the semester. It is suggested that the most important factor determining these differences in marks is the adjustment of the student to college courses.—*H. W. Karn* (Pittsburgh).

1166. Gaines, F. P. Interrelations of speech and reading disabilities. *Elem. Sch. J.*, 1941, 41, 605-613.—This is a survey of 13 studies which have touched upon the relation between speech defects and reading disabilities. 8 of the studies show a perceptible relationship, 3 show little or none, and 2 are doubtful. However, until the terms used by the investigators "are defined and standardized, studies can be of value only for specific aspects of both reading and speech, and any deductions that may at present be made must necessarily be so qualified as to be of little value." Suggestions for further research are made.—*S. S. Sargent* (Barnard).

1167. Gaines, F. P. Interrelations of speech and reading disabilities. *Quart. J. Speech*, 1941, 27, 104-110.

1168. Gates, A. I. The role of personality maladjustment in reading disability. *J. genet. Psychol.*, 1941, 59, 77-83.—This is a statement of the implications of a half-dozen previously published studies. Poor readers of adequate intelligence do not display any characteristic personality pattern, nor are they consistently inferior in respect to any personality or emotional trait. Not only do the "causes" vary from case to case, but a "cause" of failure in one case may lead to excellent performance in another. Indeed, personality maladjustments do not always accompany reading disability, nor is it clear that one is always antecedent when both do occur.—*D. K. Spelt* (Mary Baldwin).

1169. Greenhoe, F. Community contacts and participation of teachers. Washington: American Council on Public Affairs, 1941. Pp. 91. \$2.00.—Teacher community contacts can be classified as professional services, citizenship contacts, and leisure pursuits. This study is concerned chiefly

with the last. A questionnaire, constructed for the purpose, was filled out by over 9000 teachers in all parts of the country. The main findings are: (1) Teachers move about frequently but not far. (2) Teachers are less liberal than students of education, but more so than lay persons, and much more so than schoolboard members. (3) With respect to community codes of conduct teachers are clearly "a restricted and inhibited group," though comparison with other professional groups has not been made. (4) In community activities teachers play an active part, "but in no activities other than church work and parent-teacher efforts do they exercise much local leadership." A teacher's life in the community is "a continuous process of attempted assimilation by townsmen." 3 case studies are included; also sections on practical implications and further problems. Appendices contain the full questionnaire and state, regional, and national data. The bibliography lists 30 titles.—*S. S. Sargent* (Barnard).

1170. Gritten, F., & Johnson, D. M. Individual differences in judging multiple-choice questions. *J. educ. Psychol.*, 1941, 32, 423-430.—65 items of 2 forms of the Nelson-Denny vocabulary test were administered to 103 students. On one form subjects were instructed not to guess, on the other to answer all questions, i.e. to guess. An achievement score was obtained from form A and achievement and confidence scores from form B. The confidence score was determined by having subjects rate their confidence in each judgment on a 5-point scale. Correlations between scores on form A and B indicate: "(1) When instructions are given not to guess, the more confident subjects will attempt more items, and will get more right. (2) Valid scores, on which the effect of individual differences in confidence is slight, are given by instructions to answer all questions and by instructions not to guess, with the conventional correction. The correction, from the point of view of this paper, is properly called a correction for individual differences in confidence. (3) The objective test can be used, with special instructions, to secure a useful measure of confidence in a judgment."—*J. W. Macmillan* (Maryland).

1171. Haggerty, L. H. An empirical evaluation of the accomplishment quotient: a four year study at the junior high school level. *J. exp. Educ.*, 1941, 10, 78-90.—This inquiry made use of 16 consecutive distributions of AQ's for the same subjects over a 4-year test period. These separate distributions permitted detailed and comparative investigation, while the composite distribution guaranteed high reliability and showed the AQ under optimum conditions. The analyses lead the author to conclude that, "while we have only our present instruments, we are forced to be skeptical of research studies, as well as other educational procedures, which continue to treat the accomplishment quotient as a precise statistical measure."—*H. W. Karn* (Pittsburgh).

1172. Harker, G. D. Teaching students how to study: report of an experiment. *Amer. J. Nurs.*,

1941, 41, 1307-1313.—All nursing students who took a course on "how to study" showed improvement in scholastic achievement. To 59 students a special training program consisting mainly of remedial reading was administered. After 4 weeks, all 59 showed improvement over initial performance on the Iowa Silent Reading Test.—*E. S. Primoff* (U. S. Employment Service).

1173. Hartmann, G. W. A critique of the common method of estimating vocabulary size, together with some data on the absolute word knowledge of educated adults. *J. educ. Psychol.*, 1941, 32, 351-364.—Present methods of estimating vocabulary size are criticized on the ground that they "fit only the dictionaries upon which they were based." 4 lists from different dictionaries administered to 100 college students showed large variations in vocabulary size. However, if lists are selected with due care for adequate sampling procedures, the results are comparable. 4 lists of varying lengths from a single dictionary administered to normal school graduates yielded similar results, and serial order lists administered as a check showed a high degree of agreement, all indicating mean vocabularies in excess of 200,000 words. "There is only one conclusion possible—the average undergraduate has an actual comprehension or recognition vocabulary—of a magnitude conventionally deemed unbelievable."—*J. W. Macmillan* (Maryland).

1174. Hartson, L. D., & Sprow, A. J. The value of intelligence quotients obtained in secondary school for predicting college scholarship. *Educ. psychol. Measmt.*, 1941, 1, 387-398.—A study on the value of IQ's for predicting scholarship at Oberlin College led to 2 general conclusions: Students with IQ's as low as 101-105 can do acceptable work, while test scores show "a consistently closer correlation with college scholarship than with high school records."—*P. S. de Q. Cabot* (Simmons).

1175. Hastings, J. T. Testing junior high school mathematics concepts. *Sch. Rev.*, 1941, 49, 766-776.—To demonstrate the need for the use of multiple operations in different situations rather than a single exercise or response in the measurement of concept mastery in the field of junior high school mathematics, a series of 7 tests, each evoking a distinctive operation, and applicable to the same list of 35 technical terms, was devised. Correlations of scores on the 6 tests used with 331 ninth grade pupils were comparatively low, indicating that no one technique is an adequate index of the behavior measured by each of the others.—*R. C. Strassburger* (St. Joseph's College for Women).

1176. Hatcher, H. M. An experimental study to determine the relative effectiveness at the secondary level of two methods of instruction. *J. exp. Educ.*, 1941, 10, 41-47.—This investigation is an experimental study in home economics, made to determine the relative effectiveness at the secondary level of 2 methods of instruction. Essentially, the control method was wholly directed by the teacher, while in the experimental method the teacher and pupils

together determined the goals they wished to achieve, decided how best to work toward these goals, and together checked accomplishment as the unit progressed. The experimental classes achieved significantly better than the controls in all statistical comparisons, and the poorest teacher using the experimental method was able to achieve more than the best teacher using the control method.—*H. W. Karn* (Pittsburgh).

1177. Hayes, S. P. Stanford achievement tests for the blind: new and old. *Teach. Forum (Blind)*, 1941, 14, 2-5, 18.—(*Educ. Abstr.* VI: 1273).

1178. Hoppock, R., & Spiegler, S. Guidance and personnel books of 1940. New York: Occupational Index, 1941. Pp. 6. \$0.25.—A list of 96 titles.—*H. L. Ansbacher* (Brown).

1179. Hoppock, R., & Spiegler, S. 66 best books on occupational information and guidance. Arranged in suggested order of purchase for an average public school library. New York: Occupational Index, 1941. Pp. 6. \$0.25.—*H. L. Ansbacher* (Brown).

1180. Ibarrola, R. Influencia de los complejos subconscientes en la elección profesional. (The effect of subconscious complexes on vocational choice.) *Psicotecnia*, 1941, 2, 121-131.—Like other life situations, vocational adjustments are frequently complicated by affective tendencies which are not acknowledged or are wrongly rationalized by the subject. Such complexes, which are not open to investigation by ordinary psychotechnical approaches, are often standard formations well known to depth psychology. Among them are the Oedipus complex, sadism and asociality, the inferiority complex and overcompensation, and patterns of extraversion and introversion. Vocational counseling should add as standard procedures: (1) investigation of the affective relationship between father's occupation and children's choice, (2) determination of balance of ego trends and socialization, (3) study of organic and personal inferiorities and the subject's reaction to them, (4) diagnosis of extravertive and introvertive tendencies. The systematic interview would be the best means.—*H. D. Spoerl* (American International College).

1181. Jackson, R. W. B. Some difficulties in the application of the analysis of covariance method to educational problems. *J. educ. Psychol.*, 1941, 32, 414-422.—Although the analysis of variance and covariance method has been shown to have great value in the field of agriculture, it should not be adopted for use in educational problems without question. "As a matter of fact it is doubtful if any general method can be recommended as the conditions underlying the problem will determine the type of analysis to be used." 4 examples are given to show "... the inadvisability of adopting, without adapting, a statistical method developed mainly for use in another field."—*J. W. Macmillan* (Maryland).

1182. Jameson, S. H. Adjustment problems of university girls arising from the urge for recognition

and new experience. *J. soc. Psychol.*, 1941, 14, 129-144.—Interviews with freshman and junior women of a state university indicate that the causes of unhappiness among women in college cluster around the inability to be popular with men, blind dating, shocking experiences, falling in love, inadequate sex instruction, and humiliation by upper-classmen. The administrators of colleges should regard all problems of undergraduates as interrelated; integrated administrative policy and collective enterprise are necessary in bringing about adjustment.—*G. Brighouse* (Occidental).

1183. Keister, B. V. Reading skills acquired by five-year-old children. *Elem. Sch. J.*, 1941, 41, 587-596.—With a modified instructional program five-year-old children can be taught to read. Those entering Grade I under age 6 can make normal reading progress during the first year, though their skills lack permanence. "Intelligence tests and reading-readiness tests have less prognostic value for children chronologically under six years of age than they have for older children."—*S. S. Sargent* (Barnard).

1184. Kinhart, H. A. The effect of supervision on high school English. *Johns Hopk. Univ. Stud. Educ.*, 1941, No. 30. Pp. ix + 102.—At the beginning of the school year 12 sections of about 30 pupils each were equated on the basis of mental age, chronological age, and educational age in English. 2 sections were then assigned to each of 6 teachers who taught them for a half-year "trial period" under conditions as nearly identical as possible and without any supervision. At the end of that period the relative growth of the sections as measured by tests was taken as an index of teacher efficiency. On this basis the teachers were equated into 2 groups of 3 each. For the next half year one group continued teaching without supervision while the other group received supervision to the extent of about 10 hours per month. The efficacy of supervision was determined by comparing the growth made by the pupils of the two groups in educational age during the second half year. The pupils of the supervised group made a mean gain of 4.34 ± 0.54 months over those of the unsupervised group. This difference was considered significantly great since it was 8 times its own probable error.—*A. H. MacPhail* (Brown).

1185. Kramaschke, W. Weitere Untersuchungen über die Beziehungen zwischen Schulleistung und psychischem Konstitutionstypus. (Further investigations on the relationships between school performance and mental constitutional type.) *Z. menschl. Vererb. u. Konst. Lehre*, 1940, 24, 348-374.—(*Child Developm. Abstr.* XV: 1036).

1186. Lahey, M. F. L. Permanence of retention of first-year algebra. *J. educ. Psychol.*, 1941, 32, 401-413.—Algebra tests were given 4, 8, and 12 months after completion of the first-year algebra course to 229 ninth grade pupils. There was a loss of 10%, 20%, and 20% in fundamental operations test scores and a gain of 2%, 5%, and 10% in problem solving test scores. The gains in problem solving

test scores may be due to practice in geometry during the intervening periods. Intercorrelations of test scores for different periods are in the neighborhood of .8 for both tests. Test scores of problem solving and intelligence are more highly related than those of intelligence and fundamental operations. Sex differences were not statistically significant.—*J. W. Macmillan* (Maryland).

1187. Langsam, R. S. A factorial analysis of reading ability. *J. exp. Educ.*, 1941, 10, 57-63.—5 factors were yielded by the battery of 21 tests used in this study and were identified as: (1) a verbal factor *V*, (2) a perceptual factor *P*, (3) a word factor *W*, (4) a number factor *N*, and (5) a factor tentatively identified as that of seeing relationships. Although 5 factors were yielded by the analysis, 1 of the 5, the number factor *N* (which accounted for 7% of the variance of the battery of tests used), was found to be conspicuously absent from the reading tests of the battery.—*H. W. Karn* (Pittsburgh).

1188. Langston, R. G. A core vocabulary for preprimer reading. *Elem. Sch. J.*, 1941, 41, 766-773.—Analysis of 32 preprimers by 3 independent investigators showed that 79 words comprise over two-thirds of the total running words. "This core vocabulary is one which is included almost entirely within the common spoken vocabulary of children at the age when they would normally be encountering preprimer reading material. The words in this core list will have a carry-over value in reading throughout the primary grades."—*S. S. Sargent* (Barnard).

1189. Leaf, C. T. The construction and tentative standardization of two semester achievement examinations in business arithmetic. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1941. Pp: 104. \$1.30.—See *Abstr. Field Stud. Colo. St. Coll. Educ.*, 1941, 2, 33-36.

1190. Lennon, R. T. Note on line of relation method of establishing age or grade norms. *J. educ. Psychol.*, 1941, 32, 389-390.—The independent derivation and the correspondence methods of establishing norms are shown to "yield identical results only in the case that . . . the correlation of scores on each of the two tests with age is the same. . . . If the correlations of the two instruments with age are not equal . . . [one must] adhere to an independent derivation of norms, or . . . introduce the ratio of the two correlations as a correction factor in establishing the correspondences by the line of relation."—*J. W. Macmillan* (Maryland).

1191. Lentz, T. F., & Nickel, E. F. Opinionnaire correlates of vocational preference factors, II. *J. appl. Psychol.*, 1941, 25, 514-523.—The opinionnaire responses of high school graduates expressing certain occupational preferences were compared with those of graduates expressing opposite preferences. Through examination of those differences which were significant, a picture of the personality associated with a particular vocational preference could be obtained.—*E. E. Ghiselli* (California).

1192. Liss, E. The failing student. *Amer. J. Orthopsychiat.*, 1941, 11, 712-718.—This is a discussion of the emotional charges in learning with special emphasis on the relationship between learning as a psycho-physiological problem and infantile sexuality, the Oedipus phenomenon, and sibling relationships. A brief discussion by P. Blanchard follows the paper.—R. E. Perl (Jewish Board of Guardians.)
1193. Lorge, I., & Blau, R. D. The education of a genius. *Sch. & Soc.*, 1941, 54, 573-575.—Society would be repaid if more effort and money were expended on the proper education of superior children. They should be segregated and taught by superior teachers in well-equipped schools in which abilities are challenged and obligations stressed. Society must then learn to recognize genius and utilize it economically.—M. Lee (Chicago, Ill.).
1194. Mallart, J. Orientación profesional y orientación vocacional. (Professional guidance and vocational guidance.) *Psicotecnia*, 1941, 2, 176-181.—The adjective "vocational," which has recently come into competition with "professional" in Spanish psychological literature, is rejected for general usage in favor of the latter term. Characterological literature going back to the 15th century and earlier is cited in support of the contention that the 2 terms are not synonymous. "Vocational" guidance should be reserved to actual job adjustments; "professional" is regarded as the broader term. The opinions of Spanish-writing psychologists are solicited.—H. D. Spoerl (American International College).
1195. Manuel, H. T. Individual differences and educational adjustment. *Res. Bull. Texas Comm. Coord. Educ.*, 1941, No. 14. Pp. 19.—The Texas school and college program for adjusting educational programs to individual differences is described under the following headings: adjustment of the newly enrolled, use of tests in the classification of pupils, we view with alarm (tendencies to regard the average as a goal and to overemphasize immediate applications), results of the 1940-41 testing program, the 1941-42 program, and a directory.—S. S. Sargent (Barnard).
1196. Mason, C. C. Guidance in the grades. *Sch. Exec.*, 1941, 61, 16-18; 35.—This is a description of the operation of a guidance council which coordinates the activities of various school departments, community agencies, psychiatrist, and psychologists. The guidance program, aimed primarily at the prevention of personality difficulties, begins at the kindergarten level. It includes study of the child, parent education, teacher in-service training, and therapeutic work with children who are problems or show signs of incipient maladjustment.—G. S. Speer (Central YMCA College).
1197. Montes, F. Posible utilización de un cuestionario de introspección para los trabajos de orientación profesional. (The value of an introspective questionnaire in vocational guidance activities.) *Psicotecnia*, 1941, 2, 132-157.—A questionnaire containing 13 items covering a wide variety of personal traits was administered to school populations of all ages from 12 to 20. Presence or absence of the quality in question was indicated, with no attempt at quantitative self-rating. The results were analyzed statistically for the different age levels; consistency of responses is taken to indicate validity of self-estimation. Frequency curves are presented for each of 8 traits. The vocational aspect is restricted largely to general employability.—H. D. Spoerl (American International College).
1198. Morse, G. D. A differentiated program for duller high school pupils. *J. exp. Educ.*, 1941, 10, 38-40.—This study was undertaken to determine whether the educational needs of the duller high school pupils in certain New York superintendencies are being met more nearly by the adjusted offering provided in some schools or by the traditional Regents program provided in others. Some of the adjustments were: (1) a curriculum constructed to help a pupil do whatever he is going to do rather than to prepare him for admission to college; (2) adjustment of marks to avoid discouraging a pupil who is working to capacity; (3) the offering of a diploma based on teachers' examinations, not State Regents examinations. The findings suggest the following conclusions: (1) The adjustment of the program to the duller pupils did not affect the holding power of the schools. (2) The pupils for whom the program was adjusted liked their experience better than did the Regents pupils. (3) The pupils in the Regents schools scored higher on 2 attitudes tests and did much better on the Myers-Ruch Progress Test, which tests traditional subject matter. Recommendations for further study and for adjustment are presented.—H. W. Karn (Pittsburgh).
1199. Myers, V. C. Seventh-grade free-reading—its relation to certain personal and environmental factors. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1941. Pp. 161. \$2.01.—See *Microfilm Abstracts*, 1941, 3, No. 2, 38-39.
1200. Nelson, E. Measuring the freshman orientation course. *Sch. & Soc.*, 1941, 54, 598-600.—A test has been devised at Newberry College, S. C., to measure the effectiveness of an orientation program and locate common freshman misconceptions. It consists in 225 items (both information and attitude) arranged into 8 sections: the college library, study in college, my own college, student citizenship, personality and health, vocational choice, worthy home membership, and religion in college. A correlation with college grades of .57, or .36 when the psychological examination scores are held constant, is taken as evidence of validity since it is assumed that the better oriented a student is the better he will succeed. A reliability of .93 is reported.—M. Lee (Chicago, Ill.).
1201. Nemec, L. G., & Losinski, B. A study of the difficulty of Dolch Basic Sight Vocabulary in the second and third grades of the rural schools in twenty-two counties of the State of Wisconsin. *J. educ. Res.*, 1941, 35, 208-217.—The difficulty experienced in recognizing words in the Dolch list

was studied. Detailed results for each of the 220 individual words are given along with suggestions for the teaching program which can be obtained by the use of this list.—*M. Murphy* (Pennsylvania).

1202. Peterson, B. H. Can you predict who'll be able to go to college? *Sch. Exec.*, 1941, 61, 26-27.—This is a study of 957 students in the College of Agriculture at Davis, California, since 1939. Intellectual capacity was measured by total score on the Psychological Examination of the American Council on Education. A normal distribution of scores was obtained, and the scores were correlated with college grades. The author presents a table indicating "with reasonable accuracy" the chances of making college grades of 'C' average or higher, for various levels of performance on the ACE.—*G. S. Speer* (Central YMCA College).

1203. Pistor, F. A standardized measure of classroom democracy. *J. educ. Res.*, 1941, 35, 183-192.—A classroom rating blank, "Practicing democracy in the classroom," constructed by the author and designed to provide an objective and reliable measure of classroom efficiency in preparing pupils to participate in a democratic society, is described. The blank includes 120 classroom practices classified under 12 section headings. Validity, reliability, and norms are discussed.—*M. Murphy* (Pennsylvania).

1204. Pruitt, C. M., & Roth, H. Retention of subject-matter in physical science; mid-semester grades as an encouragement factor. *Proc. Okla. Acad. Sci.*, 1941, 21, 145-146.—Abstract.

1205. Reed, H. B. The place of the Bernreuter Personality, Stenquist Mechanical Aptitude, and Thurstone Vocational Interest Tests in college entrance tests. *J. appl. Psychol.*, 1941, 25, 528-534.—Scores on these 3 tests were found to bear little or no correlation with scholastic achievement.—*E. E. Ghiselli* (California).

1206. Simpson, R. H. Further analysis of the results of speed drills with the Metron-O-Scope. *J. educ. Psychol.*, 1941, 32, 386-388.—A criticism of Garver and Matthews' article (see XIV: 3203) on speed drills with the Metron-O-Scope is offered, and the "need for great care to be taken in (1) giving factual information about the subjects in any scientific experiment, (2) matching control and experimental groups, and (3) interpreting results of an experiment" is pointed out.—*J. W. Macmillan* (Maryland).

1207. Spache, G. Deriving comprehension, rate and accuracy of reading norms for a short form of the Metropolitan Achievement Reading Test. *J. educ. Psychol.*, 1941, 32, 359-364.—The total battery of the Metropolitan Achievement test for grades 4-6 takes 2½ hours. It includes tests of reading, arithmetic, vocabulary, English usage, and spelling. Abbreviations of the reading, arithmetic, and spelling tests have been made, and the data for the reading test are given. Correlations in the neighborhood of .9 are reported for short and long forms. Grade score norms for comprehension rate and percentile

norms for accuracy are given.—*J. W. Macmillan* (Maryland).

1208. Stevens, P. C., & Farquhar, J. N. Wheat Ridge high school guidance manual. Wheat Ridge, Colo.: Wheat Ridge High School, 1941. Pp. xiv + 121. (*Educ. Abstr.* VI: 1311).

1209. Stone, L. G. Reading reactions for varied types of subject matter: an analytical study of the eye-movements of college freshmen. *J. exp. Educ.*, 1941, 10, 64-77.—This study reveals a general speeding-up process in reading covering 3 successive 100-word groups. In expository prose-story-form type of material the rate is relatively fast for the first group of 100 words, with a slight increase for the second and no further increase for the third group. In scientific type of material the rate is relatively slow for the first, significantly faster for the second, and slightly faster for the third group. The first 100 words of a scientific selection are read with less efficient eye-movements, exclusive of duration of fixation, than those of a narrative selection.—*H. W. Karn* (Pittsburgh).

1210. Stroude, A. P. Reviewing the results of some guidance programs. *J. educ. Sociol.*, 1941, 15, 29-37.—An attempt is made to find out what types of social guidance are being promoted most at the present time in the secondary schools. A number of schools from all parts of the country were contacted by letters to their deans of girls. The deans were asked to submit what they considered the most valuable work sponsored by them or their assistants. The values, and the shortcomings and weaknesses as well, of present group-activity programs are discussed.—*D. G. Ryans* (Cooperative Test Service).

1211. Super, D. E. Avocations and vocational adjustment. *Character & Pers.*, 1941, 10, 51-61.—"Data gathered in an earlier questionnaire study of 273 employed male hobbyists were analyzed. . . . Men who believe they chose their jobs for economic reasons tend to derive more satisfaction from their avocations, whereas those who believe they were motivated by interest derive more satisfaction from their vocations. . . . Avocations are the manifestations of dominant interests which express themselves, if the situation permits, in vocations of the same type. If the situation is unfavorable, the dominant interest may cause the avocation to compete with the vocation for the attention and energies of their possessor, making it the major source of satisfaction."—*M. O. Wilson* (Oklahoma).

1212. Super, D. E., & Roper, S. An objective technique for testing vocational interests. *J. appl. Psychol.*, 1941, 25, 487-498.—A procedure for measuring interests by means of memory of items presented in an occupational motion picture is described. For the occupation of nursing it was found that the scores yielded by this technique were uncorrelated with ratings on the Strong Vocational Interest Blank and ratings of proficiency, but did differentiate nurses from non-nurses.—*E. E. Ghiselli* (California).

1213. Symonds, P. M. The value of courses in mental hygiene for the personality adjustment of prospective teachers. *Ment. Hyg., N. Y.*, 1941, 25, 568-575.—Autobiographies written by students in the first and last weeks of a summer session were analyzed for differences attributable to the content of a course in mental hygiene, which is described.—W. L. Wilkins (U. S. Marine Corps Base, San Diego).

1214. Taylor, E. A. Achievement scales in physical education skills for children in grades I, II and III. *Elem. Sch. J.*, 1941, 41, 677-682.—S. S. Sargent (Barnard).

1215. Thompson, C. E. The personality of the teacher as a factor not only in the total learning situation but also in developing the personality of the child. *Proc. Okla. Acad. Sci.*, 1941, 21, 133-136.—Arbitrarily determined critical scores of 38 teachers in the Bernreuter Inventory areas show that only a small percentage of these teachers is qualified to teach children. Implications of such poor personal qualifications are discussed.—M. O. Wilson (Oklahoma).

1216. Traxler, A. E. Cumulative test records: their nature and uses. *Educ. psychol. Measmt.*, 1941, 1, 323-340.—The individual cumulative record is one which records growth between testing periods as well as present status and which presupposes a comprehensive systematic testing program. Adaptations of the American Council cumulative record forms with corresponding interpretations illustrate the writer's views. Occasions and situations where such records may be useful include (1) conferences between counsellors and pupils, (2) interviews between administrators and parents, (3) transference of pupils from one school to another and placement of pupils in courses, (4) sectioning of classes according to pupils' abilities, (5) selection of pupils for special remedial work, (6) diagnosis of personality maladjustments, (7) appraisal of school programs by superintendents and principals, (8) planning individualized programs, (9) admission of students to college, and (10) recommendation of graduates to prospective employees.—P. S. de Q. Cabot (Simmons).

1217. Traxler, A. E. The nature and use of reading tests. *Educ. Rec. Bull.*, 1941, No. 34. Pp. 64.—This bulletin is designed as a working manual for teachers, counselors, and supervisors of testing programs; it describes and appraises reading tests with diagnostic features and makes suggestions for the use of tests in the diagnosis and teaching of reading. Section 1 is an introduction. Section 2 reviews reading tests for elementary, secondary, and college levels. Section 3 discusses and illustrates the use of reading tests in diagnosis and corrective instruction. Section 4 indicates the relationship between scores on certain reading tests and mental ages based on the Kuhlmann-Anderson Intelligence Test. Section 5 contains an annotated list of reading materials for all levels from primary grades to college.

A list of 26 selected references on reading tests is appended.—S. B. Sells (Brooklyn).

1218. Tressler, J. C. Tressler English Minimum Essentials Test. Form A. (Rev. ed.) Bloomington, Ill.: Public School Publ. Co., 1941. Pp. 8. \$0.75 per 25; 4¢ each.—The 7 parts of this achievement test are designed to measure proficiency in grammatical correctness, vocabulary, punctuation and capitalization, the sentence and its parts, sentence sense, inflection and accent, and spelling. It is to be used with grades 8-12. Norms are based on more than 20,000 scores.—L. M. McCabe (Cambridge, Mass.).

1219. [Various]. Guide to occupations. *Pittsb. Schs.*, 1941, 15, 151-190.—(*Educ. Abstr.* VI: 1305).

1220. Vaughn, C. L. Classroom behavior problems encountered in attempting to teach illiterate defective boys how to read. *J. educ. Psychol.*, 1941, 32, 339-350.—One group of 28 boys with CA of 13.8, IQ of 64, and reading grade 2.2 was compared with a second group of 28 with CA of 13.9, IQ of 64, and reading grade 4.2. Comparison of behavior in handwork and academic work rooms using the Haggerty-Olson-Wickman Behavior Rating Schedules indicated that "poor readers showed significantly more disinterest in school work, marked overactivity, temper outbursts, and speech difficulties in the academic rooms than did the good readers. The poor readers tended to bully other children and to be more defiant of discipline." The absence of aggressive reactions by the poor readers in the handwork rooms is attributed to the fact that they are successful in the type of work done there.—J. W. Macmillan (Maryland).

1221. Wallar, G. A. A practical aid to occupational orientation. *J. appl. Psychol.*, 1941, 25, 535-557.—An aid in vocational counseling is described which consists of a written résumé of his problem by the counselee; his ratings of 224 occupations in terms of his knowledge, interest, ability, and opportunity; and his own evaluation of his problem.—E. E. Ghiselli (California).

1222. Wheeler, L. R. A comparative study of the difficulty of learning the multiplication combinations. *J. genet. Psychol.*, 1941, 59, 189-206.—342 third grade pupils were given a multiplication test. Following the test 99 multiplication combinations were taught solely by use of a standardized educational game for 20 mins. per day on 20 consecutive school days, with a test every fifth day. Results of this program permit the ranking of the various combinations from easiest to most difficult, and comparisons are made with similar rankings from other studies. Certain current teaching procedures are criticized and specific suggestions for improving the teaching of multiplication presented.—D. K. Spelt (Mary Baldwin).

1223. Williamson, E. G., & Bordin, E. S. An analytical description of student counseling. *Educ. psychol. Measmt.*, 1941, 1, 341-354.—This is an analytical description of the counseling procedures

in the testing bureau of the University of Minnesota from 1932 to 1935 inclusive. About two thirds of the problems of 2053 cases studied were educational or vocational in nature. Social-personal-emotional problems, which constituted the next most frequent group, indicated emotional disturbances of a non-psychiatric nature, the need for encouragement and self-confidence, and the presence of social traits likely to hinder professional success. Health problems were infrequent.—*P. S. de Q. Cabot* (Simmons).

1224. **Wilson, O. P.** *A study of reading readiness tests.* *El Paso Schs Stand.*, 1941, 19, 32-35.—The author presents data on the validity and reliability of four reading readiness tests. The Betts Ready-to-Read Tests ranked first in validity.—(Courtesy *J. educ. Res.*).

1225. **Wixted, W. G., & Curoe, P. R. V.** *How well do college seniors write?* *Sch. & Soc.*, 1941, 54, 505-508.—4 groups of college seniors who had been trained in the New York City schools and were preparing for teaching were given tests in handwriting. 3 specimens were scored on the Lister and Myers penmanship scale. It was found that they were well above the norms for elementary and high school pupils in rate, but about at the 8B level in spacing, and below that level in form and movement. Movement, spacing, and form correlated between .49 and .54, rate and quality .364.—*M. Lee* (Chicago, Ill.).

1226. **Wolfe, J.** *An experimental study in remedial teaching in college freshmen mathematics.* *J. exp. Educ.*, 1941, 10, 33-37.—The results of this study show that many students entered their current course in mathematics inadequately prepared in the background skills. Incidental treatment of preliminary topics did not reduce the deficiencies sufficiently, for a significant number of students, for successful performance of the work of the current course. A remedial program served to improve the students' work in the course and to reduce the failing rate. It is concluded that the most efficient way, administratively and educationally, for an institution to meet the problem of review is by the introduction of a definite, specific, and individualized remedial program for the students who need it.—*H. W. Karn* (Pittsburgh).

1227. **Young, R. V., Pratt, W. E., & Gatto, F.** *American School Achievement Tests; primary battery I, grade one. Form A.* Bloomington, Ill.: Public School Publ. Co., 1941. Pp. 4. \$2.50 per 100; 3¢ each.—This battery is made up of 3 tests: word recognition, word meaning, and numbers. Construction and validation of each test are discussed in the manual. Reliability coefficients, determined by correlating chance halves of Forms A and B by sampling 138 cases from approximately 3000 cases in typical schools, are .96 for word recognition, .927 for word meaning, and .76 for numbers. Grade and age norms are based on median scores of more than 5000 pupils in grades 1 and 2 in rural and urban school districts of varying sizes.—*L. M. McCabe* (Cambridge, Mass.).

1228. **Young, R. V., & Pratt, W. E.** *American School Achievement Tests; primary battery II, grades two and three. Form A.* Bloomington, Ill.: Public School Publ. Co., 1941. Pp. 8. \$4.00 per 100; 5¢ each.—This battery is made up of the following tests: sentence and word meaning, paragraph meaning, arithmetic computation, arithmetic problems, language usage, and spelling. Construction and validation of each test are discussed in the accompanying manual. Coefficients of reliability determined by correlating chance halves of Forms A and B by sampling 193 cases from approximately 3000 cases in typical schools range from .717 for language usage to .925 for paragraph meaning. Grade and age norms are given for each test.—*L. M. McCabe* (Cambridge, Mass.).

1229. **Young, R. V., Pratt, E. W., & Whitmer, C.** *American School Reading Readiness Test. Form A.* Bloomington, Ill.: Public School Publ. Co., 1941. Pp. 8. \$4.00 per 100; 5¢ each.—This test, which may be administered to groups of 10 or 12 children, is made up of 8 sub-tests: vocabulary, discrimination of letter forms, discrimination of letter combinations, recognition of words (selection), recognition of words (matching), discrimination of geometric forms, following directions, and memory of geometric forms. Separate norms for kindergarten and non-kindergarten groups are provided. Weighted scores are given to provide the maximum predictive value, prediction being in terms of an estimated reading grade to be achieved at the end of the first school year. The criterion test was the Gates Primary Reading Test. Odd-even reliability (Spearman-Brown) is $.95 \pm .004$.—*L. M. McCabe* (Cambridge, Mass.).

[See also abstracts 845, 856, 910, 1002, 1008, 1029, 1255.]

MENTAL TESTS

1230. **Baker, H. J.** *Detroit Alpha Intelligence Test; for grades IV to VIII. Form S.* Bloomington, Ill.: Public School Publ. Co., 1941. Pp. 8. \$3.50 per 100; 4¢ each.—Form S and Form T (in preparation) are revisions of Forms M and R of this test, published more than 15 years ago. The new forms extend one grade lower than the older forms and provide longer tests with more verbal material (4 pages of verbal and 4 of non-verbal material). Longer time limits are provided, and the non-verbal materials are designed "to reflect to some degree habits of work, perseverance, and similar traits which are known to be important factors in aptitude for learning." The construction and validation of the test are discussed in the manual. Reliability coefficients, as computed from the scores of 422 fourth-to-seventh-grade pupils on two applications of the test 4 weeks apart, vary from .743 to .888 for the different sub-tests to .975 for the total scores. Letter ratings and mental age norms are based on 12,500 cases.—*L. M. McCabe* (Cambridge, Mass.).

1231. De Forest, R. A study of the prognostic value of the Merrill-Palmer scale of mental tests and the Minnesota preschool scale. *J. genet. Psychol.*, 1941, 59, 219-253.—170 children who had taken the Merrill-Palmer tests and 44 who had taken the Minnesota scale in nursery school were given Form L of the revised Stanford-Binet 1-88 months later. Correlation between M-P and Binet IQ's was $.55 \pm .04$; between Minnesota and Binet IQ's, $.56 \pm .07$. Non-verbal Minnesota IQ's showed least correlation with later Binet results. As age at time of M-P testing increased, prognostic accuracy for later Binet IQ's decreased. Results were uninfluenced by length of interval between tests over the range involved.—D. K. Spelt (Mary Baldwin).

1232. Froehlich, G. J. A simple index of test reliability. *J. educ. Psychol.*, 1941, 32, 381-385.—The Kuder-Richardson index of test reliability is designed for use with test scoring machines. An adaptation of this index is here given "which involves only (a) the number of items in the test, (b) the mean of the test scores, and (c) their standard deviation." Comparison of results obtained by this method and the Spearman-Brown prophecy formula on Wisconsin Achievement test scores of 2,151 individuals shows no differences in r 's greater than .058 and no differences in the rank order of the r 's on subtests. The method is recommended for use by busy classroom teachers.—J. W. Macmillan (Maryland).

1233. Katz, E. The constancy of the Stanford-Binet IQ from three to five years. *J. Psychol.*, 1941, 12, 159-181.—The data examined were the Stanford-Binet scores of 308 children obtained from age 3 to 5 (tests given every 6 months). Among the findings are: test-retest correlations range from .533 to .765; slightly higher test-retest correlations prevail for girls than for boys, perhaps due to the higher variability of the boys' scores; the group as a whole shows a small increase in IQ with age with a somewhat larger increase for girls than for boys; and approximately 40% of the group show changes of 20 or more IQ points.—F. A. Mote, Jr. (Connecticut).

1234. Remmers, H. H., & House, J. M. Reliability of multiple-choice measuring instruments as a function of the Spearman-Brown prophecy formula, IV. *J. educ. Psychol.*, 1941, 32, 372-376.—"A controlled experiment using seven hundred seventy-one junior-high-school pupils was designed to test the hypothesis that increase in reliability of multiple-choice arithmetic test items with increase in the number of response alternatives per test item is predicted by the Spearman-Brown formula. For such test items varying in number of responses from two to five the experimental data completely support the hypothesis."—J. W. Macmillan (Maryland).

1235. Remmers, H. H., & Sageser, H. W. Reliability of multiple-choice measuring instru-

ments as a function of the Spearman-Brown formula, V. *J. educ. Psychol.*, 1941, 32, 445-451.—4 identical sets of attitude scales with the number of choices being 2, 3, 5, and 7 were given to male students at Purdue. 2 methods of scoring were used, (1) using uniform values for all statements (unweighted) and (2) using Bues' scale values for the statements (weighted). "It was found with weighted scoring as the number of possible responses increased for each item the reliability increased and that the increase was in accord with the Spearman-Brown prophecy formula. It was found that when these same forms were scored without weighting the test items, the reliabilities increased as the number of possible responses increased, but not in accord with the Spearman-Brown prophecy formula."—J. W. Macmillan (Maryland).

1236. Sloan, W., & Sharp, A. A. A note on interpolation of Kent Oral Emergency Test scores into mental age years and months. *J. appl. Psychol.*, 1941, 25, 592-594.—Tables for the interpolation of Kent Oral Emergency Test scores into mental ages are presented.—E. E. Ghiselli (California).

1237. Steinbrück, F. Der Sandersche Phantasietest in entwicklungspsychologischer Deutung. (Sander's fantasy test in developmental psychological interpretation.) Jena: Dissertation, 1940. Pp. 58.

1238. Traxler, A. E. IQ's obtained on the new edition of the Kuhlmann-Anderson tests and on the Binet scale. *Elem. Sch. J.*, 1941, 41, 614-617.—Comparison of the fourth and fifth editions of the Kuhlmann-Anderson test, each taken by several thousand independent-school pupils, showed that the latter yielded a median IQ 4.7 points higher than the former. To determine whether the fifth edition gives IQ's which are too high, it was validated against the Stanford-Binet scale. Results show close agreement between the two. "If the Stanford revision and the Terman-Merrill revision . . . are accepted as criteria, the fifth edition of the Kuhlmann-Anderson tests is an improvement over the fourth edition."—S. S. Sargent (Barnard).

1239. Wechsler, D. The measurement of adult intelligence. (2nd ed.) Baltimore: Williams & Wilkins, 1941. Pp. xii + 248. \$3.50.—The primary difference between this and the first edition (see XIII: 5389) is the inclusion of a chapter of 18 pages on the clinical features of the Wechsler-Bellevue Intelligence Scales and their diagnostic application. Test patterning is related to 5 clinical groups: organic brain disease, schizophrenia, psychopathic personality (adolescents), neurotics, and mental defectives. Minor changes include revision of the wording of some of the test questions, new examples for some of the scoring directions, and addition of (1) two tables giving means and standard deviations of all the subtests of the Scale for ages 7-49, and (2) several formulas for obtaining IQ's for ages beyond those given in the original tables.—S. G. Dulsky (Rochester Guidance Center).

CHILDHOOD AND ADOLESCENCE

1240. Baughman, W. R. The response of adolescents and parents to treatment in a child guidance clinic. *Smith Coll. Stud. soc. Work*, 1941, 12, 179-180.—Abstract.
1241. Bender, L., & Woltmann, A. G. Play and psychotherapy. *Nerv. Child*, 1941, 1, 17-42.—Theories of the nature of play, from Rousseau to modern psychoanalytic theory, are reviewed. The varieties of play activities used at present in therapy are described and related to modern theories. The authors consider one of the aims of therapy to be "the proper choice of media for free, uninhibited expression," and present puppetry as a medium which meets all the pre-requisites. A comprehensive description is given of the use of puppets in therapeutic work at Bellevue Hospital. Bibliography of 102 items.—G. S. Speer (Central YMCA College).
1242. Bender, L., & Yarnell, H. An observation nursery; a study of 250 children on the psychiatric division of Bellevue Hospital. *Amer. J. Psychiat.*, 1941, 97, 1158-1174.—This is an analytic and follow-up study of 250 children from 1 to 5 years 11 months of age at the time of their first admission to the nursery. "One of the greatest functions of this service is that it has given us a deeper understanding of the infant and early child neurophysiology, intellectual and emotional development, and the child as a unit of a social group. We have learned that the infant cannot be raised in an institution without risking his normal personality development; we have learned that the only safeguard for the normal development of a child is a unified and continuous home environment for the first several years. The lack of this can never be compensated for. The child may be abused by psychotic, criminal and defective parents and may recover, however. A dull child may need more than the average foster home can give him. A bright child suffers from quarreling and rejecting parents but may respond to therapy with or without a change in the environment."—R. Goldman (Boston Psychopathic Hospital).
1243. Benjamin, E. The immature child. *Nerv. Child*, 1941, 1, 2-16.—The author finds 3 general types of reaction in the problem child: remonstrance, withdrawal, and inadequate progress or "regression." They appear at 2 or 3 years of age and may extend beyond childhood. The last group, which probably constitutes 20% of problem children, is called the immature. The author surveys 357 immature children of pre-school and school age and concludes that symptoms of immaturity are centered around relations with the family, social relations to other children, the digestive tract, the urinary system, the motor system, and speech. The primary characteristic is that behavior which is normal at an early age is continued to an age where it is no longer normal.—G. S. Speer (Central YMCA College).
1244. Brander, T. Kopfumfang, Thoraxmasse und Handkraft bei frühgeborenen Kindern im Schulalter. Vorläufige Mitteilung. II. (Head circumference, thorax mass, and handgrip in prematurely born children of school age. Preliminary report II.) *Acta paediat., Stockh.*, 1940, 28, 50-73.—(*Biol. Abstr.* XV: 23680).
1245. Chapman, R. H. The social worker's use of play in treatment of children. *Smith Coll. Stud. soc. Work*, 1941, 12, 173-174.—Abstract.
1246. Clothier, F. Problems of illegitimacy as they concern the worker in the field of adoption. *Ment. Hyg., N. Y.*, 1941, 25, 576-590.—Where an illegitimate pregnancy occurs as a neurotic symptom or as a result of stupidity, the mother's maintaining custody of the child should be questioned.—W. L. Wilkins (U. S. Marine Corps Base, San Diego).
1247. Cofer, J. D. Influence of atypical family constellations on child guidance treatment. *Smith Coll. Stud. soc. Work*, 1941, 12, 167-168.—Abstract.
1248. Coughlin, E. W. Some parental attitudes toward handicapped children. *Child*, 1941, 6, 41-45.—(*Child Developm. Abstr.* XV: 1024).
1249. Crudden, C. H. Symmetry and asymmetry in form abstraction by children. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1937. Pp. 69.—See *Microfilm Abstracts*, 1939, 2, No. 1.
1250. Dearborn, W. F., & Rothney, J. W. M. Predicting the child's development. Cambridge, Mass.: Sci-Art Publishers, 1941. Pp. 360. \$4.50.—This book presents the results of analysis of data from the "third" Harvard Growth Study. The data were collected by the longitudinal method. The study began in 1922 with approximately 3500 first grade pupils and was continued for 12 years. The summaries of studies presented in this book deal with mental and physical growth in various fractions of the total original group. Some persistent problems of mental and physical growth are outlined in the introductory chapter and answered with factual data in subsequent chapters. The problems have to do with the prediction of the course of physical growth, adolescent growth spurts, age of maximum growth, relation of mental and physical growth, constancy of IQ and physical size, the course and period of mental growth, relation between verbal and non-verbal intelligence tests, and the effect of environment on intelligence. Problems encountered in setting up and continuing a large-scale, long-time, longitudinal study are discussed in chapter 2. Chapter 3 describes the various measures used in the studies.—D. B. Lindsley (Brown).
1251. Diefenbach, G. The effect of prolonged unemployment and relief on adolescent boys. *Smith Coll. Stud. soc. Work*, 1941, 12, 211-212.—Abstract.
1252. Diner, A. Some factors affecting the institutional adjustment of boys with primary behavior disorders. *Smith Coll. Stud. soc. Work*, 1941, 12, 197-198.—Abstract.
1253. English, H. B., & Raimy, V. Studying the individual school child: a manual of guidance. New York: Holt, 1941. Pp. vii + 131. \$0.95.—

This is a guide for the preparation of case studies of individual school children, as an aid in really understanding child psychology, and in using psychological principles and procedures. "We have thought it better to help the student by suggesting *how* to go about his observing rather than *what* he is to observe. . . . For the purposes of description we depict certain broad areas of the child's life—intellectual and scholastic, physical, social, character—within which and across which the facts about him may be found. But the grouping is frankly arbitrary, and all the emphasis is upon a comprehensive and meaningful picture of the whole child to be derived from these facts." Intended primarily for pre-service teachers, this manual is adaptable for in-service use. Appendices on: administration of the procedure; interpretation of the Snellen chart; a list of achievement and intelligence tests; tests for hearing loss; "reminder list" of physical aspects of the child; behavior rating scales; home and parent rating scales; and a complete sample case study. Bibliography.—*L. J. Stone* (Vassar).

1254. Feiker, H. A. A comparative study of case work treatment of adolescent boys in 1930 and 1940. *Smith Coll. Stud. soc. Work*, 1941, 12, 174-175.—Abstract

1255. Finlayson, A. B. Social and economic background of retarded children. *J. educ. Sociol.*, 1941, 15, 38-45.—36 educationally retarded Negro children in Washington, D. C., were studied in an effort to analyze their social-economic background and its relationship to retardation. Each child furnished a detailed account of his home life and general environment. The children and their parents or guardians were also visited in their homes. "The problem of Negro retardation is a serious one and can be solved in America only by democratic problem-solving educational programs" conducted through the school.—*D. G. Ryans* (Cooperative Test Service).

1256. Franchot, C. Treatment of children rejected or over-protected by their mothers. *Smith Coll. Stud. soc. Work*, 1941, 12, 175-176.—Abstract.

1257. Frank, L. K. General considerations: certain problems of puberty and adolescence. *J. Pediat.*, 1941, 19, 294-301.—Recent intensive studies of adolescence indicate an orderly process of growth during this period, but individual differences in rate of progress and in structural and functional dimensions must not be ignored. Many psychosomatic disorders of maturity may have their origin in the emotional problems arising from the organic instability, organic incongruity, incoordination, and excessive social demands peculiar to this period. Fears of abnormality, personal ideas, or parents' attitudes may prevent the boy or girl from seeking competent advice. By preventive medicine and group health programs the pediatrician can help the adolescent to achieve a functional efficiency appropriate to his specific organism.—*M. Henderson* (Bradley Home).

1258. Freed, A. H. A comparative study of child guidance cases from two contrasting economic areas. *Smith Coll. Stud. soc. Work*, 1941, 12, 170.—Abstract.

1259. Glueck, B. Child guidance twenty years after. *Nerv. Child*, 1941, 1, 60-72.—Child guidance must be concerned not alone with the nature and behavior of the child, but also with the nature of the milieu. Because of the march of events today the need for mental hygiene and child guidance is more imperative than before.—*G. S. Speer* (Central YMCA College).

1260. Göring, E. Beitrag zur Psychologie des Bettnässens der Kinder. (Contribution to the psychology of bed wetting of children.) Munich: Dissertation, 1940. Pp. 53.

1261. Hauff, L. v. Absichtslos entstandene Kritzeleien als Ausdruck der seelischen Lage jugendlicher Mädchen. (Unintentional scribbles as expression of the psychological state of adolescent girls.) Jena: Dissertation, 1940. Pp. 31.

1262. Hildreth, G. The child mind in evolution: a study of developmental sequences in drawing. New York: King's Crown Press, 1941. Pp. 163. \$2.00.—This monograph describes a single child's mental development as shown in his drawings of trains from the age of 2 to 11. A detailed study of the content and characteristics of the drawings follows a description of the child and his background. A chapter on psychological interpretation is organized around: the growth curve; the tendency to draw the whole structure; growth through increasing differentiation in the drawings; the influence of knowledge of function on the drawings; perception; synthesis; stages in thinking; simplification tendency in drawing. 148 of the drawings are reproduced in the unnumbered pages of the appendix. Bibliography on children's drawings.—*L. J. Stone* (Vassar).

1263. Karpe, M. Why some parents discontinue child guidance treatment on their own accord. *Smith Coll. Stud. soc. Work*, 1941, 12, 180-181.—Abstract.

1264. Keller, M. J. Outgrowing childhood problems: a follow-up study of fifty untreated children. *Smith Coll. Stud. soc. Work*, 1941, 12, 183-184.—Abstract.

1265. Knoepfmacher, J. The use of play in child guidance treatment. *Smith Coll. Stud. soc. Work*, 1941, 12, 177-178.—Abstract.

1266. Koshuk, R. P. Social influences affecting the behavior of young children. *Monogr. Soc. Res. Child Develpm.*, 1941, 6, No. 2. Pp. iii + 71.—This is a survey of the significant research publications since 1925 dealing with the influence of social factors on the behavior of young children with an emphasis upon the period from birth to 6 years. 525 studies are reviewed with the focus on socio-cultural aspects of the environment. A concluding chapter lists key concepts and research questions with which current investigations are concerned. Trends refer to (1) an increasing emphasis on the effects of the socio-

cultural setting; (2) comprehensive long-term studies with control groups; (3) more systematic attempts to devise indirect means of understanding the inner and dynamic organization of personal experience; (4) more reliable techniques of sampling, assembling, and analyzing data; and (5) increased understanding between specialists in such fields as cultural anthropology, psychology, sociology, and psychiatry.—*P. S. de Q. Cabot* (Simmons).

1267. Krieger, E. A follow-up study of twenty-five adolescents who presented physical symptoms without organic basis. *Smith Coll. Stud. soc. Work*, 1941, 12, 184-185.—Abstract.

1268. Layton, W. K. A study of pubescence in junior high school boys. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1941. Pp. 317. \$4.66.—See *Microfilm Abstracts*, 1941, 3, No. 2, 80-81.

1269. Lewis, W. D. A comparative study of the personalities, interests, and home backgrounds of gifted children of superior and inferior educational achievement. *J. genet. Psychol.*, 1941, 59, 207-218.—From a parent population of 45,000 elementary school pupils in 36 states, 1,834 pupils with IQ's of 115 or over were selected. 1,078 had educational ages 1 year or more above their MA's; 756 had EA's 1 year or more below their MA's. Teachers were asked to (1) rate pupils on a list of 70 personality traits, (2) indicate from lists of 10 extra-curricular activities and 21 hobbies those in which each child was interested, (3) rate economic status as superior, average, or inferior wherever possible. These last data were supplemented by the Terman-Taussig occupational classification. The accelerated group was characterized as "possessing more desirable personality traits, interests that are intellectual in nature, and superior home backgrounds." The retarded group possess less desirable personality traits, interests that call for motor activity, and come from inferior homes.—*D. K. Spelt* (Mary Baldwin).

1270. Ling, B. Form discrimination as a learning cue in infants. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1939. Pp. 303.—See *Microfilm Abstracts*, 1939, 2, No. 1. (See also XV: 2858).

1271. Louttit, C. M. Preventive mental hygiene in childhood. *Nerv. Child*, 1941, 1, 43-59.—Preventive mental hygiene has 2 major methods, education and clinical guidance. Education requires not only that we ensure adequate life experiences for the child, but that those who come in close contact with him understand his needs and growth processes. This may be realized through widespread adult education and the introduction of mental hygiene education into schools and colleges. The mental hygienist should also contribute to modern attempts at social amelioration. Clinical guidance will direct its efforts at the more adequate direction of behavioral organization, so that minor personal defects may be recognized and eradicated before they become seriously organized.—*G. S. Speer* (Central YMCA College).

1272. Louttit, C. M., & Watson, R. Vineland Social Maturity scores of entering first grade children. *Train. Sch. Bull.*, 1941, 38, 133-137.—120 children who acted as their own informants on the Vineland scale yielded an average social quotient of 100. The distributions of quotients by school groupings differing in cultural background and according to the occupational status of their fathers "strongly suggest that social maturity scores are affected by the socio-economic culture from which the children come and (or) by the mental superiority associated therewith." Correlation between SQ and IQ in 62 subjects was $.38 \pm .07$. Sex differences were insignificant.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

1273. Maurer, K. M. Patterns of behavior of young children as revealed by a factor analysis of trait "clusters." *J. genet. Psychol.*, 1941, 59, 177-188.—2 lists of 50 synonymous adjectives describing young children were checked, a week apart, by each of 50 raters, each for a child she knew well. A multiple factor analysis, by Thurstone's centroid method, for 26 adjectives on the first list yielded 3 factors. "3 clusters . . . centered around reputations for (a) being extremely conforming, (b) being sociable and somewhat conforming, and (c) being non-conforming."—*D. K. Spelt* (Mary Baldwin).

1274. McGraw, M. B. Neuro-motor maturation of anti-gravity functions as reflected in the development of a sitting posture. *J. genet. Psychol.*, 1941, 59, 155-175.—By pulling the infant by the hands to a sitting position, and observing the changes in his behavior, one can analyze the development of the independent assumption of a sitting posture. 1,717 observations on 82 infants, ranging in age from birth to 800 days, were supplemented by daily observations on 1 pair of identical twin males and 2 unrelated females from birth to 400 days of age. 5 phases of rising behavior and 6 phases of resistance to gravity or falling are described and illustrated. Group and individual curves of development for each phase are presented. Implications of the observed development with respect to its neural counterparts are discussed.—*D. K. Spelt* (Mary Baldwin).

1275. Mechem, M. E. The relationship of affectivity to various measures of growth in children. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1941. Pp. 159. \$1.99.—See *Microfilm Abstracts*, 1941, 3, No. 2, 82-84.

1276. Meloan, E. L. Excessive appetite: a behavior symptom in maladjusted children. *J. Pediat.*, 1941, 19, 632-637.—"A need exists to recognize the emotional origin of excessive craving for food in nonobese and obese children." The occurrence and the persistence of a large appetite is a frequent symptom of social maladjustment in children of normal or superior intelligence. 7 typical case histories of nonobese children with excessive appetites are reported. These patients were normal in height, weight, physical development, blood and urine analyses, glucose tolerance, and basal metabolic rate. Psychiatric interviews were

followed by a diminishing of the symptom with no physical changes nor changes in weight.—*M. Henderson* (Bradley Home).

1277. **Miller, D. C.** *Youth and national morale.* *J. educ. Sociol.*, 1941, 15, 17-28.—National morale is defined as the degree of confidence held by all the people in the ability of the nation to cope with the future and to wrest from it the goals desired by the people. Such confidence depends on (1) belief in the superiority of the social structure in the in-group, (2) the degree and manner in which personal goals are identified with national goals, (3) judgments of the competence of national leadership, (4) belief that resources are available to meet the threat of the out-group, and (5) confidence that the national goals which have to be achieved are of permanent value. The attitudes of youth, factors in the social situation that affect youth, and false notions now current are discussed in connection with the relationship of youth to national morale. A plea is made for the development of a type of training that will provide ability to adapt to the changing economic postwar period without jeopardizing present defense production.—*D. G. Ryans* (Cooperative Test Service).

1278. **Mira y López, E.** *Psicología evolutiva del niño y el adolescente.* (Genetic child psychology and the adolescent.) Rosario, Argentina: Editorial Ruiz, 1941. Pp. 271.—Of the 15 chapters, 12 are devoted to psychical developments in early childhood, 2 to later childhood, and the last to adolescence. Prenatal development and the neonatal situation are discussed; the progress of the total personality is a unifying theme, and the point of view is functional and dynamic. An appendix contains the Ballard test and the Ozeretzki scale of psychomotor development.—*H. D. Spoerl* (American International College).

1279. **Moody, E. L.** *Prognostic value of the attitudes of children toward child guidance treatment.* *Smith Coll. Stud. soc. Work*, 1941, 12, 181-182.—Abstract.

1280. **Moos, W.** *Über elektiven Mutismus bei Kindern.* (Elective mutism in children.) *Praxis*, 1941, 30, 452.—Abstract.

1281. **Nolan, J.** *The problems and child guidance treatment of prematurely born children.* *Smith Coll. Stud. soc. Work*, 1941, 12, 171.—Abstract.

1282. **Pearson, H.** *Family relationships in three-child families as seen in a child guidance clinic.* *Smith Coll. Stud. soc. Work*, 1941, 12, 171-172.—Abstract.

1283. **Peterson, C. H., & Spano, F. L.** *Breast feeding, maternal rejection and child personality.* *Character & Pers.*, 1941, 10, 62-66.—Duration of breast feeding is related neither to personality in children at the nursery school or adolescent levels nor to maternal rejection of the child. 27 references.—*M. O. Wilson* (Oklahoma).

1284. **Reymert, M. L.** *The Mooseheart system of child guidance.* *Nerv. Child*, 1941, 1, 73-99.—The author traces the history of the Mooseheart Laboratory of Child Research, describes its present organization, outlines the system of guidance in operation, and points out the possibilities for research in an institution where 24-hour control of the activity of the child is possible. Sample research studies are described. A list of publications of the laboratory is included.—*G. S. Speer* (Central YMCA College).

1285. **Rosenbaum, B.** *Factors related to the outcome of treatment of adolescent girls.* *Smith Coll. Stud. soc. Work*, 1941, 12, 182-183.—Abstract.

1286. **Russell, C. M.** *Functional speech disorders in children.* New York: Author, 19 E. 88th St., 1941. Pp. 8.—Functional speech disorders are always involved with other main functional difficulties and are inseparably connected with sensory and association troubles. Both speech and these other general disorders are symptoms of persistent infantilisms. Background is provided for understanding the principles of retraining based on configurative education.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

1287. **Snyder, W. U.** *A survey of recent studies in the measurement of personality, attitudes, and interests of adolescents.* *J. gen. Psychol.*, 1941, 25, 403-420.—Studies concerning this topic in the last 5 years are reviewed under: (1) method of subjective questionnaires, (2) rating scale or evaluative methods, (3) objective or laboratory methods (Rorschach etc.), and (4) larger studies using a number of different methods. 50 references.—*C. N. Cofer* (George Washington).

1288. **Stern, E. S.** *The relative value of using one or two case workers in child guidance.* *Smith Coll. Stud. soc. Work*, 1941, 12, 178-179.—Abstract.

1289. **Stevenson, G. S.** *Mental-hygiene problems of youth today.* *Ment. Hyg., N. Y.*, 1941, 25, 539-551.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego).

1290. **Thurston, E.** *Grandparents in the three-generation home: a study of their influence on the behavior problems of children.* *Smith Coll. Stud. soc. Work*, 1941, 12, 172-173.—Abstract.

1291. **Zeligs, R.** *Environmental factors annoying to children.* *Sociol. soc. Res.*, 1941, 25, 549-556.—285 sixth grade children were asked to list all things which annoy, irritate, or bother them. It was found that many children are disturbed by such things in their environment as inconveniences, larger animals, and insects. More girls than boys are annoyed by these factors.—*O. P. Lester* (Buffalo).

[See also abstracts 866, 921, 976, 979, 1020, 1034, 1089, 1115, 1155, 1163, 1183.]

l
t
t
a
a
r
h
e
A

r
h
t.
h
s
al
h
d
of
d
d
l.

es
id
5,
st
ve
h-
ch
of
er

ne
ll.

b-
25,
ps

ee-
the
oc.

oy-
56.
all
It
by
ces,
oys
lo).
34,